Service Manual

Monochrome Printer

P-4030D

P-4030DN

P-4530DN

P-5030DN

P-6030DN

Rev.: B.0
Date: 09-07-2015
2LVSM06B

Triumph-Adler

Service Manual

Monochrome Printer

P-4030D
P-4030DN
P-4530DN
P-5030DN
P-6030DN

Rev.: B.0
Date: 07-09-2015
2LVSM06B

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

It may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for proper disposal.

ATTENTION

IL Y A UN RISQUE D’EXPLOSION SI LA BATTERIE EST REMPLACEE PAR UN MODELE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES UTILISEES SELON LES INSTRUCTIONS DONNEES.

Il peut être illégal de jeter les batteries dans des eaux d’égout municipales. Vérifiez avec les fonctionnaires municipaux de votre région pour les détails concernant des déchets solides et une mise au rebut appropriée.

Notation of products in the manual

For the purpose of this service manual, products are identified by print speed at A4.

P-6030DN : 60 ppm model
P-5030DN : 50 ppm model
P-4530DN : 45 ppm model
P-4030DN : 40 ppm model (with Network)
P-4030D : 40 ppm model (without Network)

Revision history

Revision	Date	pages	Revised contents
1	11 October 2012	CONTENTS	Correction of Page 1-3-1 (3) Printing an event log : 1-3-15 to 1-3-16 Installation guide : SSD(HD-6)
		1-1-2	Change of Specification Output tray capacity / Faceup : 100 sheets to 250 sheets
		1-1-3	Change of Description “Expanded HDD (SSD)” to “SSD (HD-6)”.
		1-1-8, 9	Correction of Figure 1-1-6 The position of No.11 was corrected.
		1-2-4	Correction of Figure 1-2-6 The container label was changed.
		1-2-6	Correction of Figure 1-2-9
		1-2-7	Correction of Figure 1-2-13
		1-2-8	Correction of Figure 1-2-14 and Figure 1-2-15
		1-2-10	Change of Procedures Procedures 1 and 2 were replaced.
		1-3-4, 9	Addition of Description “(83) Full page printing mode” was added.
		1-3-10	Addition of Description "OP Network Status" was added.
		1-3-11	Addition of Description "Test Page" was added.
		1-4-19	Addition of Description The check of TRA31was added.
		1-4-24, 30	Addition of Description "(15)Carrier leaking occurs." was added.
		1-5-9, 10	Change of Procedures Procedures of "(3) Detaching and refitting the MP paper feed pulley" was changed.
		1-5-31	Correction of Figure 1-5-52 Developer fan motor (Rating label) : outside to inside
2	December 2012	CONTENTS	Correction of Page 1-6-2 Remarks on PWB replacement : 1-6-3
		1-2-2	Form change of 9, packing position change of 12 and 13
		1-3-6	Correction of "description" and "supplement" at (39).
		1-3-14	Addition of Service item “Drum heater (110V only)” was added.
		1-6-2	Addition of Procedure “Emargency-UPDATE” was added.
		2-1-8	Addition of the drum heater (110V only).
		2-2-7, 8	Addition of the drum heater (110V only).
		2-3-6, 9, 10	Addition of the connector of YC9 (110V only).

Revision	Date	pages	Revised contents
2	December 2012	2-4-9	Setting-range change of X9: 0 and 1 are changed into 0 and 2.
		2-4-11 to 14	Addition of the connector of YC9 (110V only) :2-4-11, 13 Correction of header (the model number) : 2-4-11 to 14
3	15 February 2013	Contents	Correction of page 2-4 Appendix
		1-4-23	Notes addition (F code)
		1-4-11 to 20	F code addition
		Address	Changed the address of souse africa
4	12 September 2013	Contents 2-4-11	2-4-1 (4) Maintenance command addition
		1-3-6 1-3-22, 23	Added the comments: (25) of Service status page and (9)Count/(11)-(h) of Event log
		2-4-4	Change of Setting value and Factory setting for N5
		2-4-6	Correction of Factory setting for S7
5	26 December 2013	1-1-2	Added the comments: First print
		2-2-7, 2-2-8	Correction: change of the No.2 and No.3 and change of the parts name
6	31 March 2014	2-4-13 to 20	Correction: The conditions of USBLOG acquisition
7	18 August 2014	1-3-4 1-3-7 to 9	Correction: Description of Service Status Page
		1-3-7	Correction: temperature → humidity in (48) and (49)
8	8 September 2014	1-3-4	Correction: Description of Service Status Page
		1-6-1, 1-6-2	Correction: Procedure
9	6 November 2014	1-1-1	Change: Hagaki, Oufuku Hagaki
		1-3-7 to 9	Added: Description of the counter value
A	23 February 2015	1-3-8	Change: 5 to 100(%)
B	2 July 2015	1-4-3	Added: J105

Safety precautions

This booklet provides safety warnings and precautions for our service personnel to ensure the safety of their customers, their machines as well as themselves during maintenance activities. Service personnel are advised to read this booklet carefully to familiarize themselves with the warnings and precautions described here before engaging in maintenance activities.

Safety warnings and precautions

Various symbols are used to protect our service personnel and customers from physical danger and to prevent damage to their property. These symbols are described below:

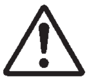
⚠DANGER: High risk of serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

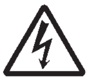
⚠WARNING: Serious bodily injury or death may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

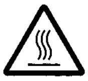
⚠CAUTION: Bodily injury or damage to property may result from insufficient attention to or incorrect compliance with warning messages using this symbol.

Symbols

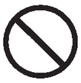
The triangle (△) symbol indicates a warning including danger and caution. The specific point of attention is shown inside the symbol.

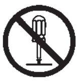

General warning.


Warning of risk of electric shock.

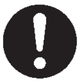

Warning of high temperature.

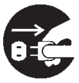
⊘ indicates a prohibited action. The specific prohibition is shown inside the symbol.

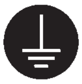

General prohibited action.


Disassembly prohibited.

● indicates that action is required. The specific action required is shown inside the symbol.


General action required.


Remove the power plug from the wall outlet.


Always ground the copier.

1. Installation Precautions

⚠WARNING

- Do not use a power supply with a voltage other than that specified. Avoid multiple connections to one outlet: they may cause fire or electric shock. When using an extension cable, always check that it is adequate for the rated current. .... 🛇
- Connect the ground wire to a suitable grounding point. Not grounding the copier may cause fire or electric shock. Connecting the earth wire to an object not approved for the purpose may cause explosion or electric shock. Never connect the ground cable to any of the following: gas pipes, lightning rods, ground cables for telephone lines and water pipes or faucets not approved by the proper authorities. .... ⏚

⚠CAUTION:

- Do not place the copier on an infirm or angled surface: the copier may tip over, causing injury. .... 🛇
- Do not install the copier in a humid or dusty place. This may cause fire or electric shock. .... 🛇
- Do not install the copier near a radiator, heater, other heat source or near flammable material. This may cause fire. .... 🛇
- Allow sufficient space around the copier to allow the ventilation grills to keep the machine as cool as possible. Insufficient ventilation may cause heat buildup and poor copying performance. .... 🛇
- Always handle the machine by the correct locations when moving it. .... ❗
- Always use anti-toppling and locking devices on copiers so equipped. Failure to do this may cause the copier to move unexpectedly or topple, leading to injury. .... ❗
- Avoid inhaling toner or developer excessively. Protect the eyes. If toner or developer is accidentally ingested, drink a lot of water to dilute it in the stomach and obtain medical attention immediately. If it gets into the eyes, rinse immediately with copious amounts of water and obtain medical attention. .... ❗
- Advice customers that they must always follow the safety warnings and precautions in the copier's instruction handbook. .... ❗

2. Precautions for Maintenance

⚠WARNING

- Always remove the power plug from the wall outlet before starting machine disassembly. ....
- Always follow the procedures for maintenance described in the service manual and other related brochures. ....
- Under no circumstances attempt to bypass or disable safety features including safety mechanisms and protective circuits. ....
- Always use parts having the correct specifications. ....
- Always use the thermostat or thermal fuse specified in the service manual or other related brochure when replacing them. Using a piece of wire, for example, could lead to fire or other serious accident. ....
- When the service manual or other serious brochure specifies a distance or gap for installation of a part, always use the correct scale and measure carefully. ....
- Always check that the copier is correctly connected to an outlet with a ground connection. ....
- Check that the power cable covering is free of damage. Check that the power plug is dust-free. If it is dirty, clean it to remove the risk of fire or electric shock. ....
- Never attempt to disassemble the optical unit in machines using lasers. Leaking laser light may damage eyesight. ....
- Handle the charger sections with care. They are charged to high potentials and may cause electric shock if handled improperly. ....

⚠CAUTION

- Wear safe clothing. If wearing loose clothing or accessories such as ties, make sure they are safely secured so they will not be caught in rotating sections. ....
- Use utmost caution when working on a powered machine. Keep away from chains and belts. ....
- Handle the fixing section with care to avoid burns as it can be extremely hot. ....
- Check that the fixing unit thermistor, heat and press rollers are clean. Dirt on them can cause abnormally high temperatures. ....

- Do not remove the ozone filter, if any, from the copier except for routine replacement. ....
- Do not pull on the AC power cord or connector wires on high-voltage components when removing them; always hold the plug itself. ....
- Do not route the power cable where it may be stood on or trapped. If necessary, protect it with a cable cover or other appropriate item. ....
- Treat the ends of the wire carefully when installing a new charger wire to avoid electric leaks. ....
- Remove toner completely from electronic components. ....
- Run wire harnesses carefully so that wires will not be trapped or damaged. ....
- After maintenance, always check that all the parts, screws, connectors and wires that were removed, have been refitted correctly. Special attention should be paid to any forgotten connector, trapped wire and missing screws. ....
- Check that all the caution labels that should be present on the machine according to the instruction handbook are clean and not peeling. Replace with new ones if necessary. ....
- Handle greases and solvents with care by following the instructions below: ....
  · Use only a small amount of solvent at a time, being careful not to spill. Wipe spills off completely.
  · Ventilate the room well while using grease or solvents.
  · Allow applied solvents to evaporate completely before refitting the covers or turning the power switch on.
  · Always wash hands afterwards.
- Never dispose of toner or toner bottles in fire. Toner may cause sparks when exposed directly to fire in a furnace, etc. ....
- Should smoke be seen coming from the copier, remove the power plug from the wall outlet immediately. ....

3. Miscellaneous

⚠WARNING

- Never attempt to heat the drum or expose it to any organic solvents such as alcohol, other than the specified refiner; it may generate toxic gas. ....
- Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur. ....

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CONTENTS

1-1 Specifications

1-1-1 Specifications 1-1-1
1-1-2 Parts names 1-1-4
  (1) Machine (front side) 1-1-4
  (2) Machine (rear side) 1-1-6
  (3) Operation section 1-1-7
1-1-3 Machine cross section 1-1-8
  (1) 60/50/45 ppm model 1-1-8
  (2) 40 ppm model 1-1-9

1-2 Installation

1-2-1 Installation environment 1-2-1
1-2-2 Unpacking and installation 1-2-2
1-2-3 Install the expansion memory (option) 1-2-12
1-2-4 Install the memory card (SD card) (option) 1-2-13
1-2-5 Option composition 1-2-14

1-3 Maintenance Mode

1-3-1 Service mode 1-3-1
  (1) Executing a service mode 1-3-1
  (2) Description of service mode 1-3-2
  (3) Printing an event log 1-3-16

1-4 Troubleshooting

1-4-1 Paper misfeed detection 1-4-1
  (1) Paper misfeed indication 1-4-1
  (2) Paper misfeed detection condition 1-4-1
    (2-1) PF-320 (500 sheets Paper feeder) 1-4-1
    (2-2) PF-315+ (Bulk Paper Feeder) 1-4-2
1-4-2 Self-diagnostic function 1-4-8
  (1) Self-diagnostic function 1-4-8
  (2) Self diagnostic codes 1-4-8
1-4-3 Image formation problems 1-4-24
  (1) No image appears (entirely white). 1-4-25
  (2) No image appears (entirely black). 1-4-25
  (3) Image is too light. 1-4-26
  (4) The background is colored. 1-4-27
  (5) White streaks are printed vertically. 1-4-27
  (6) Black streaks are printed vertically. 1-4-28
  (7) Streaks are printed horizontally. 1-4-28
  (8) Spots are printed. 1-4-28
  (9) Image is blurred. 1-4-29
  (10) Paper is wrinkled. 1-4-29
  (11) Offset occurs. 1-4-29
  (12) Part of image is missing. 1-4-29
  (13) Fusing is loose. 1-4-30
  (14) Image is out of focus. 1-4-30
  (15) Carrier leaking occurs. 1-4-30
1-4-4 Electric problems 1-4-31
1-4-5 Mechanical problems 1-4-35

1-5 Assembly and disassembly

1-5-1 Precautions for assembly and disassembly........ 1-5-1
    (1) Precautions........ 1-5-1
    (2) Drum unit........ 1-5-1
    (3) Toner........ 1-5-1

1-5-2 Outer covers........ 1-5-3
    (1) Detaching and refitting the top cover........ 1-5-3
    (2) Detaching and refitting the inlet cover and slot cover........ 1-5-3
    (3) Detaching and refitting the right upper cover........ 1-5-4
    (4) Detaching and refitting the right lower cover........ 1-5-4
    (5) Detaching and refitting the rear left cover........ 1-5-5
    (6) Detaching and refitting the left upper cover........ 1-5-5
    (7) Detaching and refitting the left lower cover........ 1-5-6
    (8) Detaching and refitting the rear cover........ 1-5-6
1-5-3 Paper feed section........ 1-5-8
    (1) Detaching and refitting the paper feed roller........ 1-5-8
    (2) Detaching and refitting the retard roller........ 1-5-8
    (3) Detaching and refitting the MP paper feed pulley........ 1-5-9
1-5-4 Developer section........ 1-5-13
    (1) Detaching and refitting the developer unit........ 1-5-13
1-5-5 Drum section........ 1-5-15
    (1) Detaching and refitting the drum unit........ 1-5-15
    (2) Detaching and refitting the chager roller unit........ 1-5-15
1-5-6 Transfer/separation section........ 1-5-16
    (1) Detaching and refitting the transfer roller assembly........ 1-5-16
    (2) Detaching and refitting the separation needle unit........ 1-5-17
1-5-7 Optical section........ 1-5-18
    (1) Detaching and refitting the laser scanner unit........ 1-5-18
1-5-8 Fuser section........ 1-5-19
    (1) Detaching and refitting the fuser unit........ 1-5-19
1-5-9 ejection section........ 1-5-21
    (1) Detaching and refitting the ejection unit........ 1-5-21
1-5-10 PWBs........ 1-5-22
    (1) Detaching and refitting the main PWB........ 1-5-22
    (2) Detaching and refitting the engine PWB........ 1-5-22
    (3) Detaching and refitting the relay-L PWB........ 1-5-24
    (4) Detaching and refitting the power source PWB........ 1-5-25
    (5) Detaching and refitting the high voltage PWB........ 1-5-26
    (6) Detaching and refitting the operation PWB........ 1-5-28
1-5-11 Others........ 1-5-29
    (1) Detaching and refitting the main driving motor unit........ 1-5-29
    (2) Detaching and refitting the paper feed driving motor unit........ 1-5-30
    (3) Detaching and refitting the power source fan motor........ 1-5-30
    (4) Direction of installing the principal fan motors........ 1-5-31

1-6 Requirements on PWB Replacement

1-6-1 Upgrading the firmware........ 1-6-1
1-6-2 Remarks on PWB replacement........ 1-6-3
    (1) Engine PWB........ 1-6-3

2-1 Mechanical Construction

2-1-1 Paper feed/conveying section 2-1-1
  (1) Cassette paper feed section 2-1-1
  (2) MP tray paper feed section 2-1-2
  (3) Conveying section 2-1-3
2-1-2 Drum section 2-1-4
  (1) Charger roller unit 2-1-4
  (2) Cleaning unit 2-1-5
2-1-3 Developer section 2-1-6
2-1-4 Optical section 2-1-7
  (1) Laser scanner section 2-1-7
2-1-5 Transfer/Separation section 2-1-8
2-1-6 Fuser section 2-1-9
2-1-7 Eject/Feedshift section 2-1-11
2-1-8 Duplex conveying section 2-1-13

2-2 Electrical Parts Layout

2-2-1 Electrical parts layout 2-2-1
  (1) PWBs 2-2-1
  (2) Switches and sensors 2-2-3
  (3) Motors 2-2-5
  (4) Clutches and others 2-2-7

2-3 Operation of the PWBs

2-3-1 Main PWB (MPWB) 2-3-1
2-3-2 Engine PWB (EPWB) 2-3-6
2-3-3 Power source PWB (PSPWB) 2-3-13
2-3-4 Relay-L PWB (R-LPWB) 2-3-15
2-3-5 High voltage PWB (HVPWB) 2-3-18

2-4 Appendixes

2-4-1 Appendixes 2-4-1
  (1) Maintenance kits 2-4-1
  (2) Repetitive defects gauge 2-4-2
  (3) Firmware environment commands 2-4-3
  (4) Maintenance Commands 2-4-11
  (5) System Error (Fxxxx) Outline 2-4-12
  (6) Wiring diagram (60/50/45 ppm model) 2-4-21
  (7) Wiring diagram (40ppm model) 2-4-23

Installation Guide

500 sheets paper feeder
2000 sheets bulk paper feeder
SSD (HD-6)
IEEE1284 Interface
Network interface
Wireless LAN interface

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1-1-1 Specifications

Item		Specifications			
		60 ppm	50 ppm	45 ppm	40 ppm
Type		Desktop			
Printing method		Electrophotography by semiconductor laser			
Paper weight	Cassette	60 to 120 g/m^2			
	MP tray	60 to 220 g/m^2, 230 g/m^2 (Cardstock)			
Paper type	Cassette	Plain, Recycled, Bond, Color (Colour), Preprinted, Letterhead, Prepunched, Rough, High quality, Custom 1 to 8			
	MP tray	Plain, Recycled, Bond, Color (Colour), Preprinted, Letterhead, Prepunched, Rough, High quality, Label, Transparency, Cardstock, Vellum, Thick, Envelope, Custom 1 to 8			
Paper size	Cassette	Legal, Oficio II, Mexican Oficio, Letter, Executive, Statement, Folio, A4, B5(JIS), A5, B6 *1, A6 *1, Oufuku Hagaki *1, B5(ISO), C5, DL *1, 16K, Custom			
	MP tray	Legal, Oficio II, Mexican Oficio, Letter, Executive, Statement, Folio, A4, B5(JIS), A5, B6, A6, Oufuku Hagaki, Hagaki, B5(ISO), C5, Commercial #10, DL, Commercial #9, Monarch, Commercial #6-3/4, Youkei4, Youkei2, 16K, Custom			
	*1: 60/50/45 ppm model only				
Printing speed (ppm) Full speed	[Simplex] A4/Letter	60/62	50/52	45/47	40/42
	-/Legal	- /50	- /42	- /38	- /33
	B5R	48	40	36	33
	A5R	32	27	23	22
	A6R	32	27	23	22
	[Duplex] A4/Letter	43/44	36/37	32/33	20/21
	-/Legal	- /25	- /21	- /16	- /16.5
	B5R	34	28	25	16.5
	A5R	23	19	16	11
Printing speed (ppm) Half speed	[Simplex] A4/Letter	30/31	25/26	22.5/23.5	20/21
	-/Legal	- /25	- /21	- /19	- /17
	B5R	24	20	18	16.5
	A5R	16	13.5	11.5	11
	A6R	16	13.5	11.5	11
	[Duplex] A4/Letter	21.5/22	18/18.5	16/16.5	10/10.5
	-/Legal	- /12.5	- /10.5	- /8	- /8
	B5R	17	14	12.5	8
	A5R	11.5	9.5	8	5.5

Item		Specifications			
		60 ppm	50 ppm	45 ppm	40 ppm
Resolution		Fine1200, Fast1200(KIR), 600dpi(KIR) , 300dpi			
First print time (A4, feed from cassette)		9.0 s or less (Excluding time for system stabilization immediately after turning on the main power.)			
Warm-up time (22 °C/ 71.6 °F, 60% RH)	Power on/ Off mode/ Sleep mode	25 s or less	20 s or less	15 s or less	15 s or less
	Low power mode	-			
Paper capacity	Cassette	500 sheets (80g/m^2)			
	MP tray	100 sheets (80 g/m^2)			
Output tray capacity	Facedown	500 sheets (67g/m^2)			250 sheets (67g/m^2)
	Faceup	250 sheets (67g/m^2)			-
Photoconductor		a-Si drum (diameter 30 mm)			
Image write system		Semiconductor laser			
Charging system		Contact charger roller method			
Developer system		Mono component dry developing method Toner replenishing: Automatic from the toner container			
Transfer system		Transfer roller method			
Separation system		Small diameter separation, dischager needle (DC bias)			
Cleaning system		Counter blade cleaning + cleaning roller			
Charge erasing system		Exposure by cleaning lamp (LED)			
Fusing system		Heat and pressure fusing with the heat roller and the press roller Heat source: halogen heater Abnormally high temperature protection devices: thermostat			
CPU		PowerPC465, ARM7/ARM9			PowerPC465 *1
Main memory		256 MB / 1280 MB (Standard / Max) *2			
Operating system		Windows XP, Windows XP Professional, Windows Server 2003, Windows Server 2003 x64 Edition, Windows Vista x86 Edition, Windows Vista x64 Edition, Windows 7 x86 Edition, Windows 7 x64 Edition, Windows Server 2008, Windows Server 2008 x64 Edition, Apple Macintosh OS X			
Interface	Standard	USB device interface connector: 1 (USB 2.0) USB host interface connector: 2 (USB 2.0) Network interface connector: 1 (10BASE-T/100BASE-TX/1000BASE-T) *3			
	Option	eKUIO slot: 1			
Page description language		PRESCRIBE			
Emulation		PCL6, KPDL3, XPS, Line printer, IBM Proprinter X24E, EPSON LQ-850			

Item		**Specifications**			
		60 ppm	**50 ppm**	**45 ppm**	**40 ppm**
Operating environment	**Temperature**	10 to 32.5 °C/50 to 90.5 °F			
	Humidity	15 to 80% RH			
	Altitude	2,500 m/8,202 ft or less			
	Brightness	1,500 lux or less			
Dimensions (W × D × H)		380 × 416 × 320 mm / 14 15/16” × 16 3/8 “× 12 1/4”			380 × 416 × 285 14 15/16” × 16 3/8 “× 11 1/4”
Weight (with toner container)		14.6 kg / 32.2 lb			13.5kg/29.8lb
Space required (W × D)		380 × 593 mm / 14 15/16” × 23 3/8” (using MP tray)			
		380 × 1138 mm / 14 15/16” × 44 13/16” (using 2000 sheets paper feeder + Faceup tray)			380 × 799 mm / 14 15/16” × 31 7/16” (using 2000 sheets paper feeder)
Power source					
120 V AC, 60 Hz		more than 10.0 A			
220 - 240 V AC, 50/60 Hz		more than 6.0 A			
Options		500 sheets paper feeder, 2000 sheets bulk paper feeder, Faceup tray *4, SSD (HD-6), IEEE1284 Interface, Network interface, Wireless LAN interface, Expanded memory, SD card, Card Authentication Kit, IC card reader, Data Security Kit(E), USB keyboard, UG-33(Thin print)			

*1: 40 ppm (without Network) model ;
*2: 40 ppm (without Network) model ; 128 MB / 1152 MB (Standard / Max)
*3: 40 ppm (without Network) model ; Network interface connector : 0
*4: 60/50/45 ppm model only

NOTE: These specifications are subject to change without notice.

1-1-2 Parts names

(1) Machine (front side)

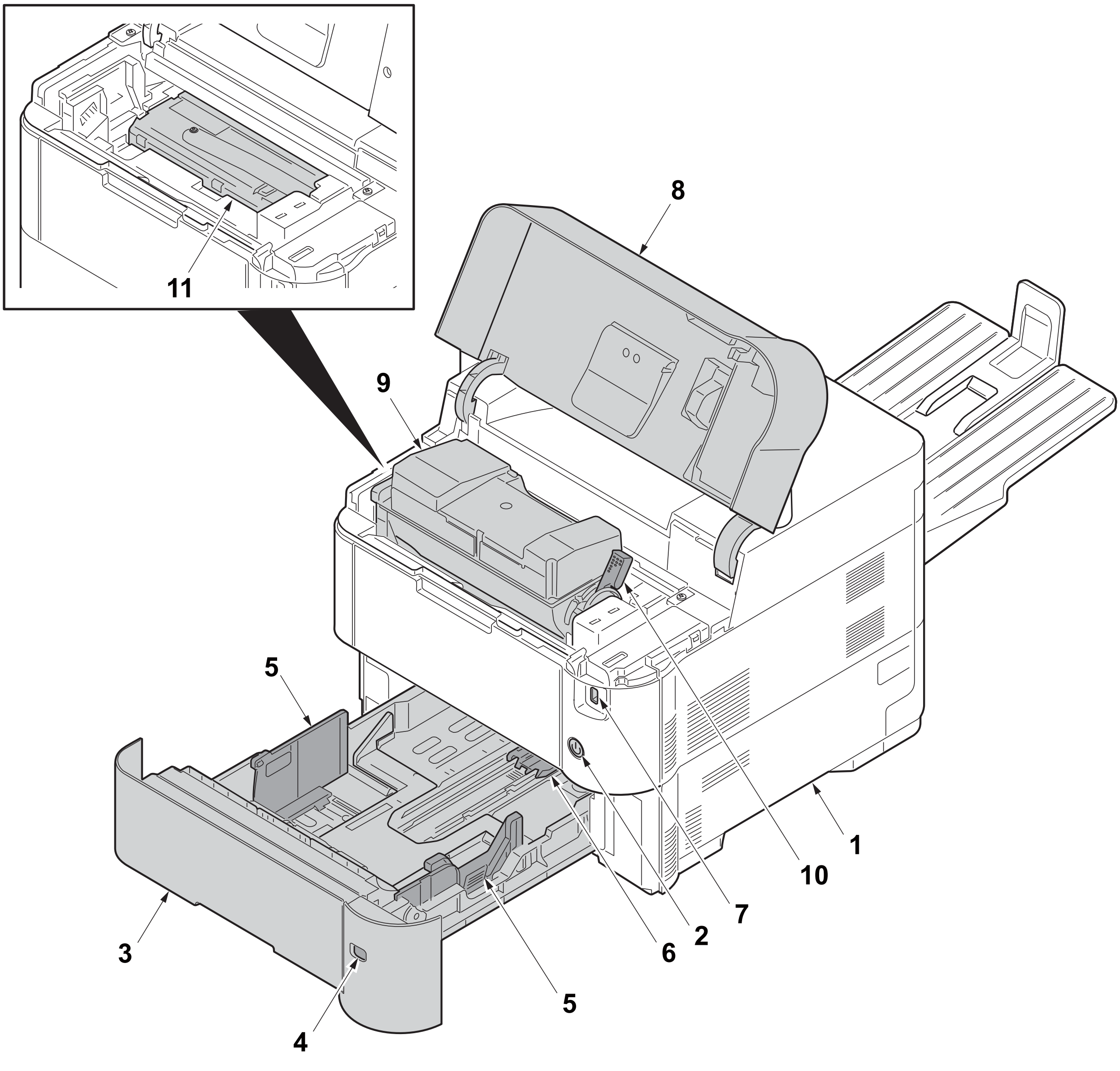


Figure 1-1-1

1. Machine
2. Power switch
3. Cassette
4. Paper size label
5. Paper width guides
6. Paper length guide
7. USB memory slot
8. Top cover
9. Toner container
10. Lock lever (Toner container)
11. Developer unit

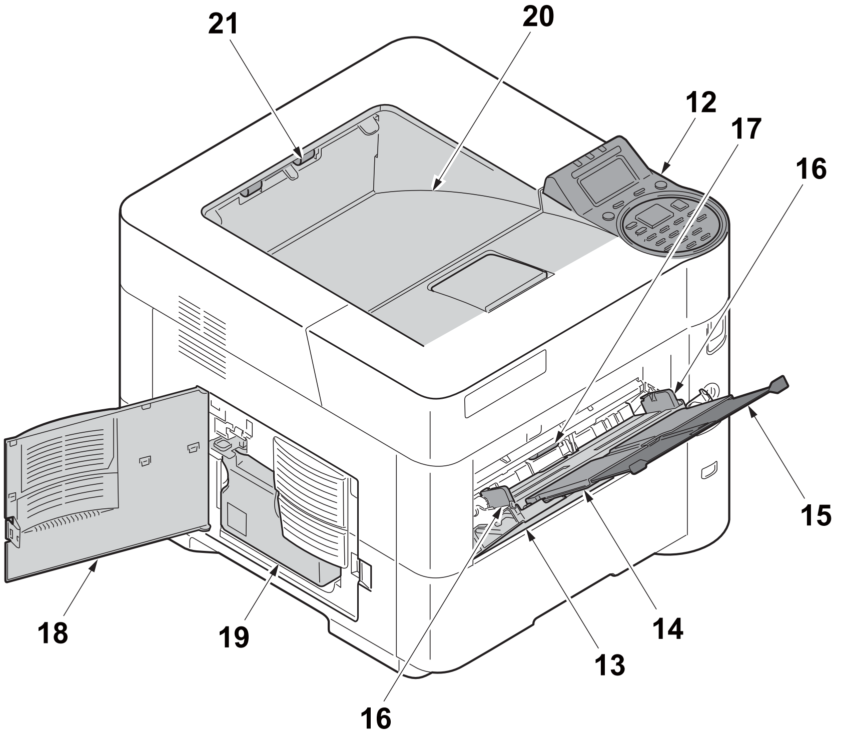

21
20
12
17
16
15
14
13
16
19
18

Figure 1-1-2

12. Operation panel	17. MP paper feed roller
13. MP (multi purpose) tray	18. Left cover
14. MP middle tray	19. Waste toner box
15. MP top tray	20. Top tray (facedown)
16. MP Paper width guides	21. Eject roller

(2) Machine (rear side)

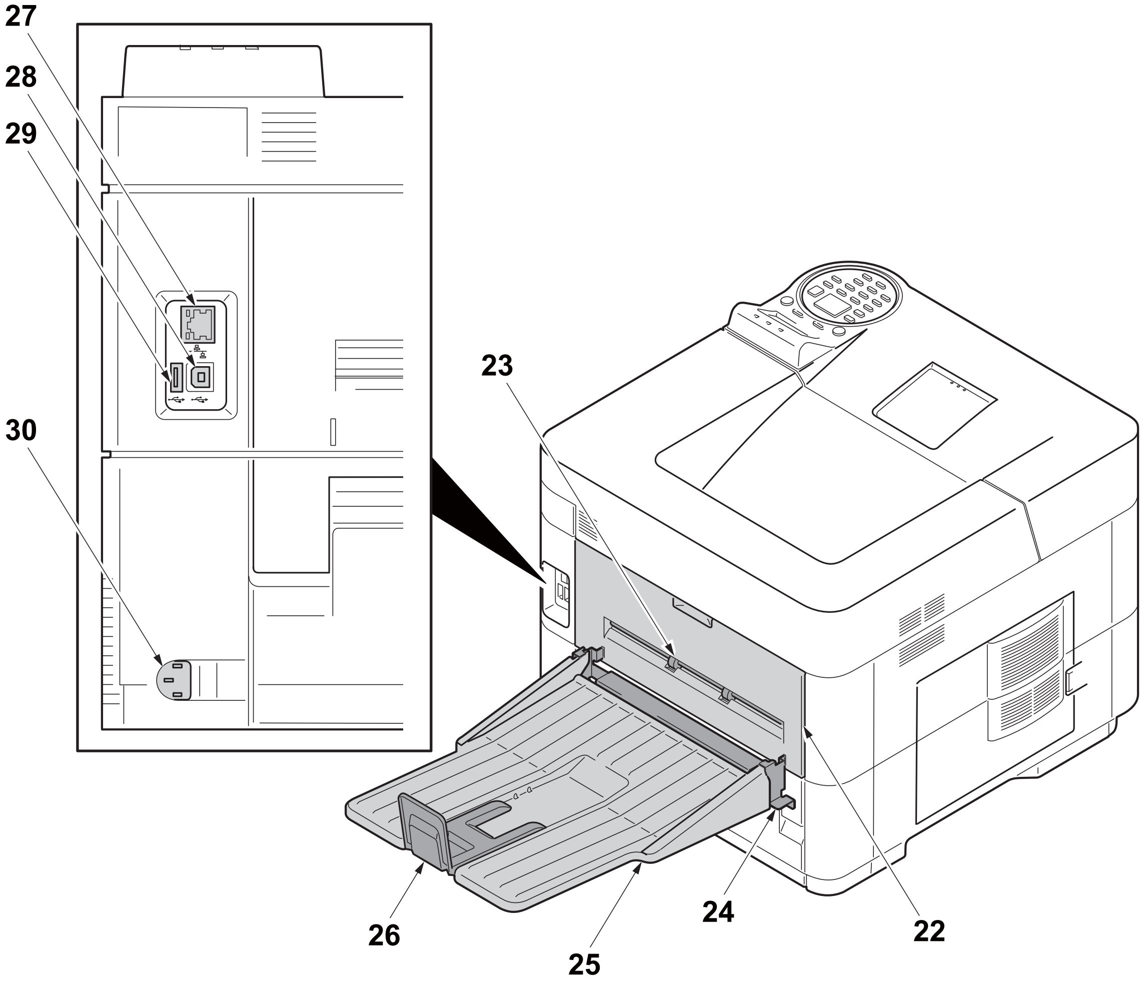


Figure 1-1-3

22. Rear cover	29. USB port
23. Faceup roller *1	30. Power cord connector
24. Tray attachment plate *2	
25. Faceup tray *2	
26. Paper stopper *2	*1: 60/50/45 ppm model only
27. Network interface connector *3	*2: 60/50/45 ppm model only (Option)
28. USB interface connector	*3: Except 40 ppm model (without Network)

(3) Operation section

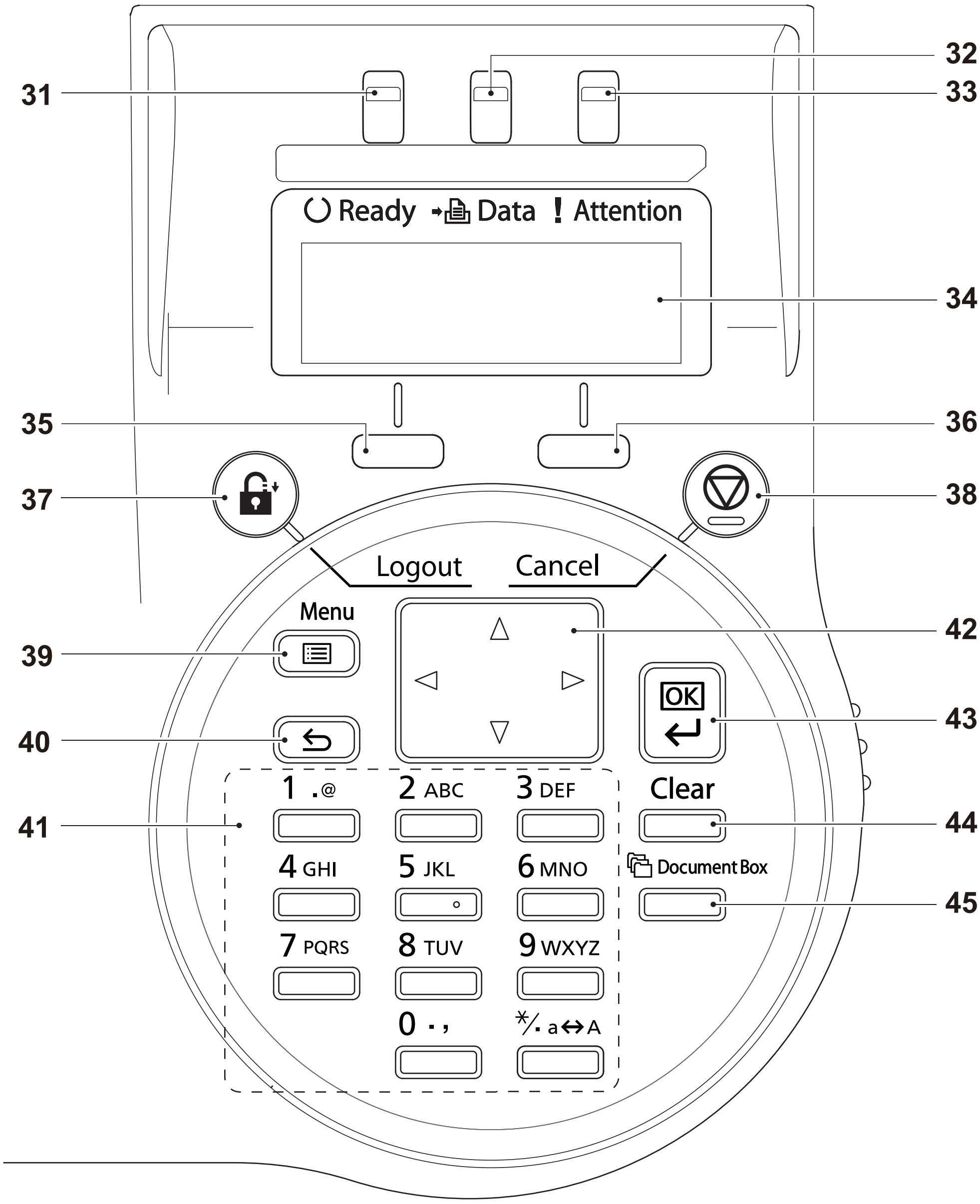

31
32
33
Ready
Data
Attention
34
35
36
37
38
Logout
Cancel
Menu
39
42
OK
43
40
1 .@
2 ABC
3 DEF
Clear
41
44
4 GHI
5 JKL
6 MNO
Document Box
45
7 PQRS
8 TUV
9 WXYZ
0 . ,
*/. a↔A

Figure 1-1-4

31. Ready indicator	37. Logout key	43. OK key
32. Data indicator	38. Cancel key	44. Clear key
33. Attention indicator	39. Menu key	45. Document box key
34. Message display	40. Back key	
35. Left select key	41. Numeric keys	
36. Right select key	42. Cursor keys	

1-1-3 Machine cross section

(1) 60/50/45 ppm model

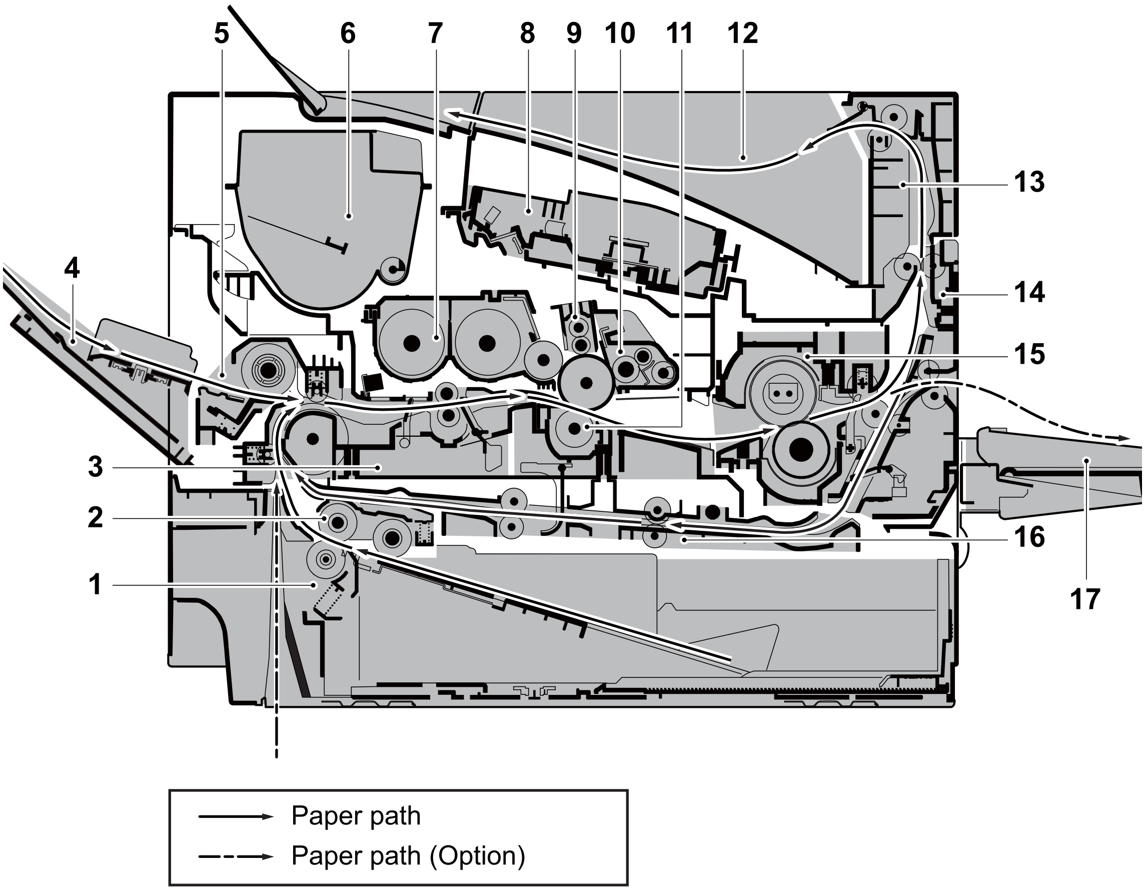
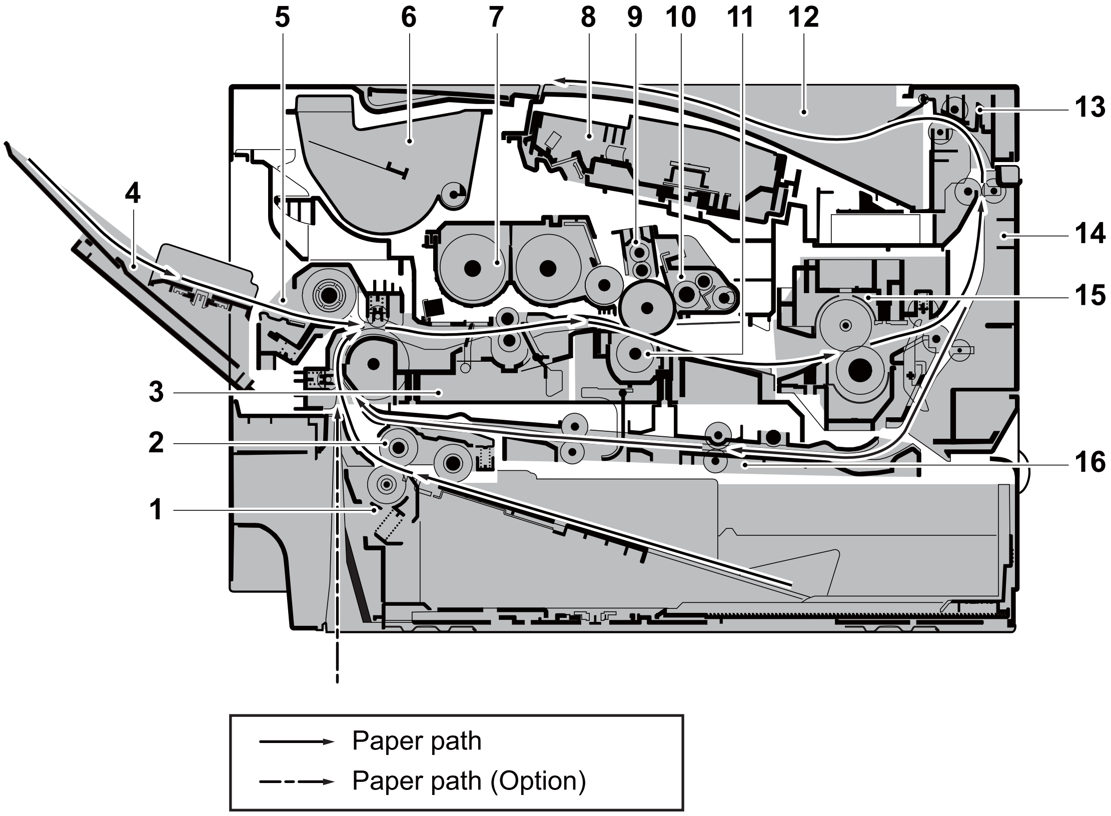

5
6
7
8
9
10
11
12
13
14
15
16
17
4
3
2
1
Paper path
Paper path (Option)

Figure 1-1-5

1. Cassette	10. Drum unit
2. Cassette paper feed section	11. Transfer/Separation section
3. Paper feed conveying section	12. Eject tray (facedown)
4. MP tray	13. Eject section
5. MP tray paper feed section	14. Eject conveying section
6. Toner container	15. Fuser unit
7. Developer unit	16. Duplex conveyning section
8. Laser scanner unit (LSU)	17. Faceup tray (option)
9. Charger roller unit	

(2) 40 ppm model



5
6
7
8
9
10
11
12
13
4
14
15
3
2
16
1
Paper path
Paper path (Option)

Figure 1-1-6

1. Cassette
2. Cassette paper feed section
3. Paper feed conveying section
4. MP tray
5. MP tray paper feed section
6. Toner container
7. Developer unit
8. Laser scanner unit (LSU)
9. Charger roller unit
10. Drum unit
11. Transfer/Separation section
12. Eject tray (facedown)
13. Eject section
14. Eject conveying section
15. Fuser unit
16. Duplex conveyning section

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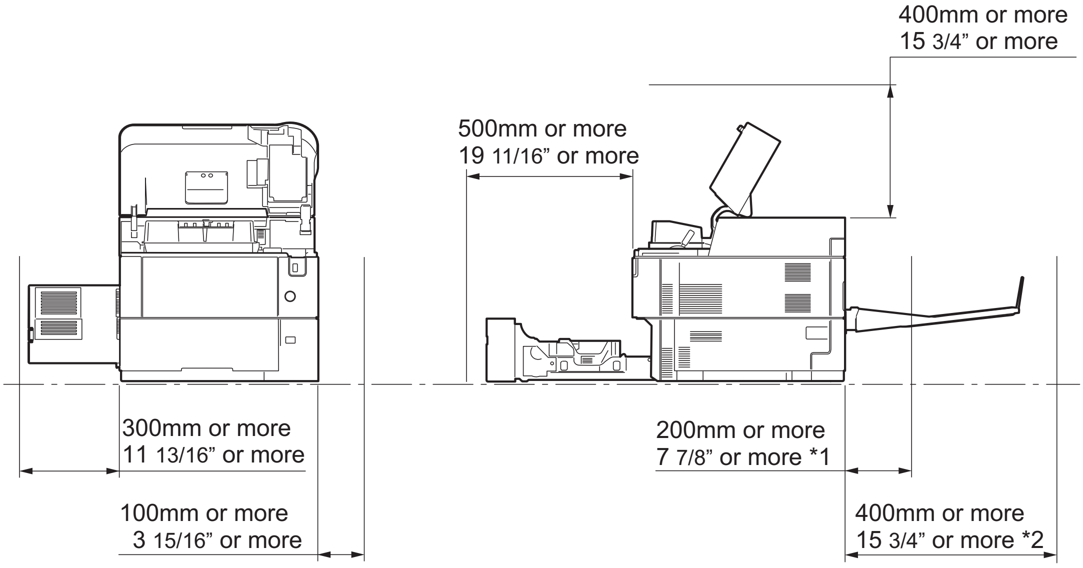
1-2-1 Installation environment

1. Temperature: 10 to 32.5°C/50 to 90.5°F
2. Humidity: 15 to 80% RH
3. Power supply: 120 V AC, 12.0 A
   220 - 240 V AC, 6.5 A
4. Power supply frequency: 50 Hz ±2%/60 Hz ±2%
5. Installation location
   Avoid direct sunlight or bright lighting. Ensure that the photoconductor will not be exposed to direct sunlight or other strong light when removing paper jams.
   Avoid locations subject to high temperature and high humidity or low temperature and low humidity; an abrupt change in the environmental temperature; and cool or hot, direct air.
   Avoid places subject to dust and vibrations.
   Choose a surface capable of supporting the weight of the machine.
   Place the machine on a level surface (maximum allowance inclination: 1°).
   Avoid air-borne substances that may adversely affect the machine or degrade the photoconductor, such as mercury, acidic of alkaline vapors, inorganic gasses, NOx, SOx gases and chlorine-based organic solvents.
   Select a well-ventilated location.
6. Allow sufficient access for proper operation and maintenance of the machine.


400mm or more
15 3/4” or more
500mm or more
19 11/16” or more
300mm or more
11 13/16” or more
200mm or more
7 7/8” or more *1
100mm or more
3 15/16” or more
400mm or more
15 3/4” or more *2

*1: Without the faceup tray

*2: With the faceup tray (60/50/45 ppm model)

Figure 1-2-1

1-2-2 Unpacking and installation

Unpacking

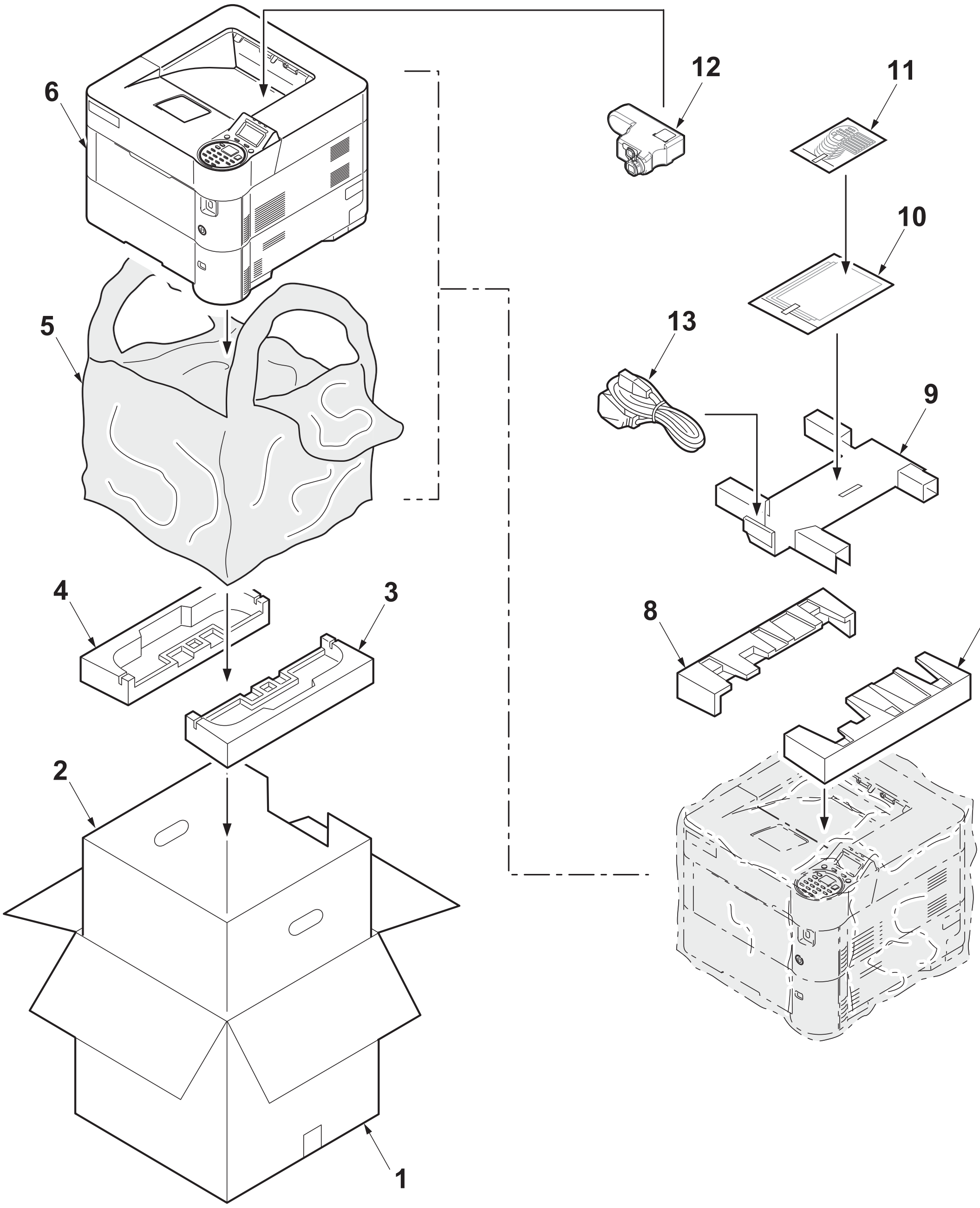


Figure 1-2-2

1. Outer case
2. Inner case
3. Bottom pad R
4. Bottom pad L
5. Machine cover (740 × 700)
6. Machine
7. Upper pad R
8. Upper pad L
9. Top tray
10. Operation guide
11. Operation sheets Assy *1
12. Waste toner bottle
13. Power cord

*1: Except 240V model

Caution: Place the machine on a level surface.

Removing the tapes and pads

1. Remove two tapes.
2. Remove the protection sheet.

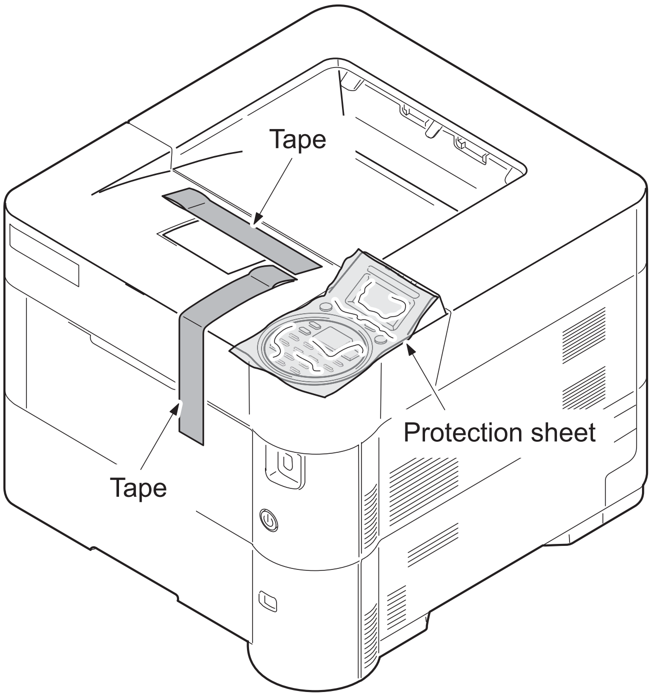

Tape
Protection sheet
Tape

Figure 1-2-3

3. Remove four tapes.

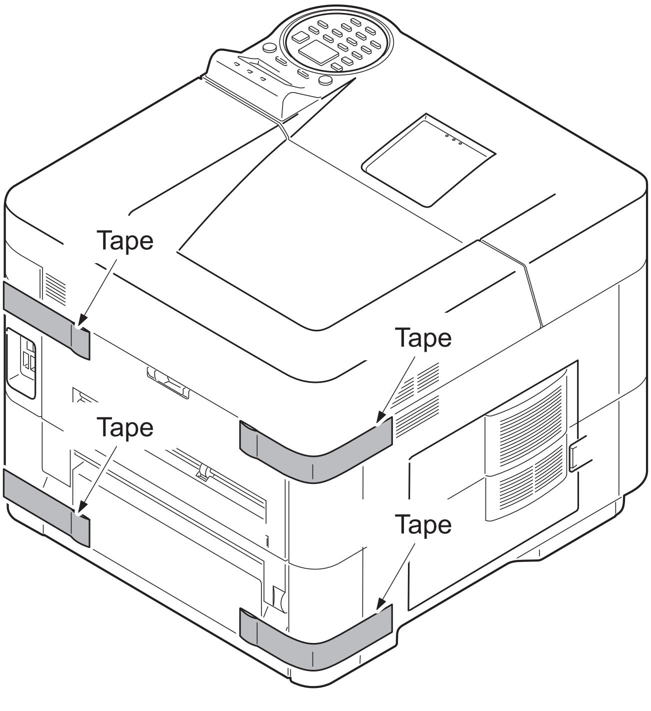

Tape
Tape
Tape
Tape

Figure 1-2-4

(60/50/45 ppm model only)

4. Open the top cover.
5. Remove the tape and the spacer.

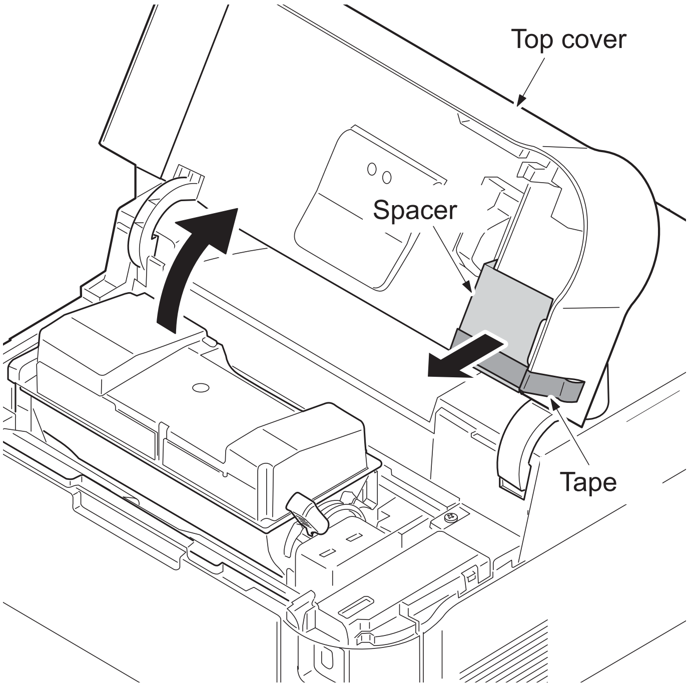

Top cover
Spacer
Tape

Figure 1-2-5

Installing the toner container

1. Open the top cover.
2. Remove the container label by pulling forwards.

   Caution: Check the contents of the container label and remove a container.

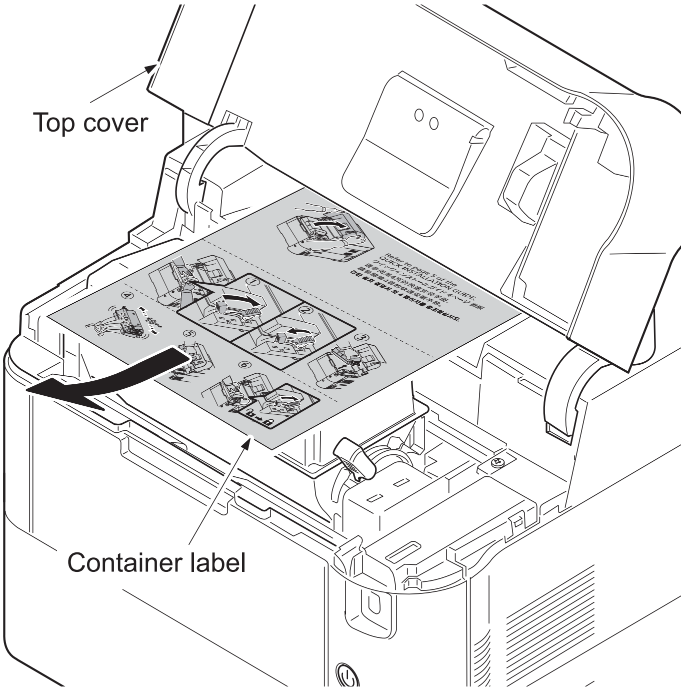

Top cover
Container label

Figure 1-2-6

3. Rotate the toner container lock lever to the lock position and then remove the toner container from the printer by returning it to the unlock position.

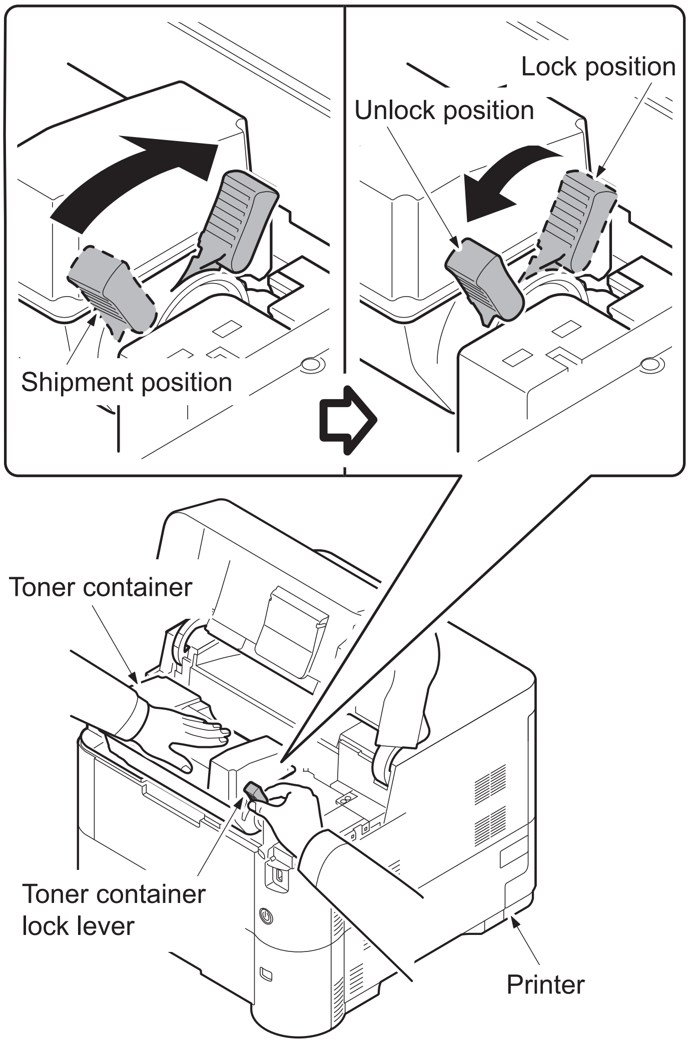

Lock position
Unlock position
Shipment position
Toner container
Toner container lock lever
Printer

Figure 1-2-7

4. Shake the turned toner container 10 times or more as shown in the figure in order to distribute the toner evenly inside the container.
   Caution:Do not press too firmly on the center of the toner container or touch the toner feed slot or the terminal parts.
5. Set the toner container to the printer and then turn the toner container lock lever to the lock position.
6. Close the top cover.

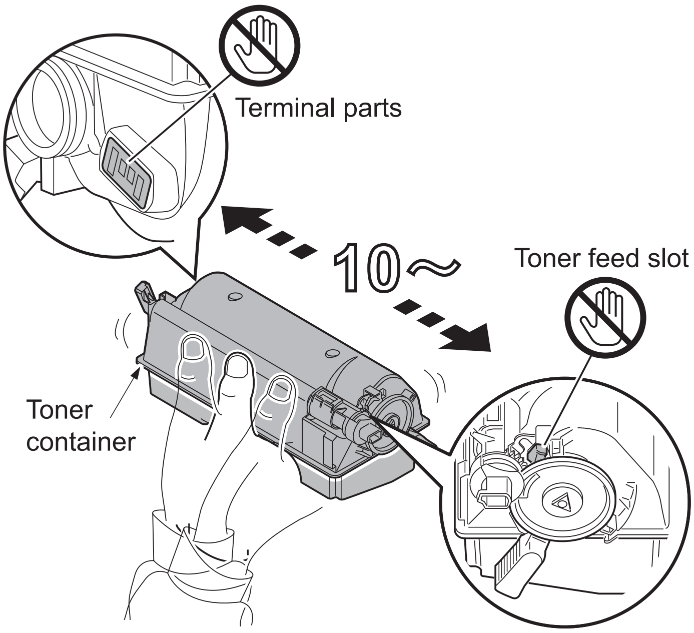

Terminal parts
10～
Toner feed slot
Toner container

Figure 1-2-8

Installing the waste toner box

1. Openthe left cover.
2. Open the cap of the waste toner box.
3. Install the waste toner box.
4. Close the left cover.

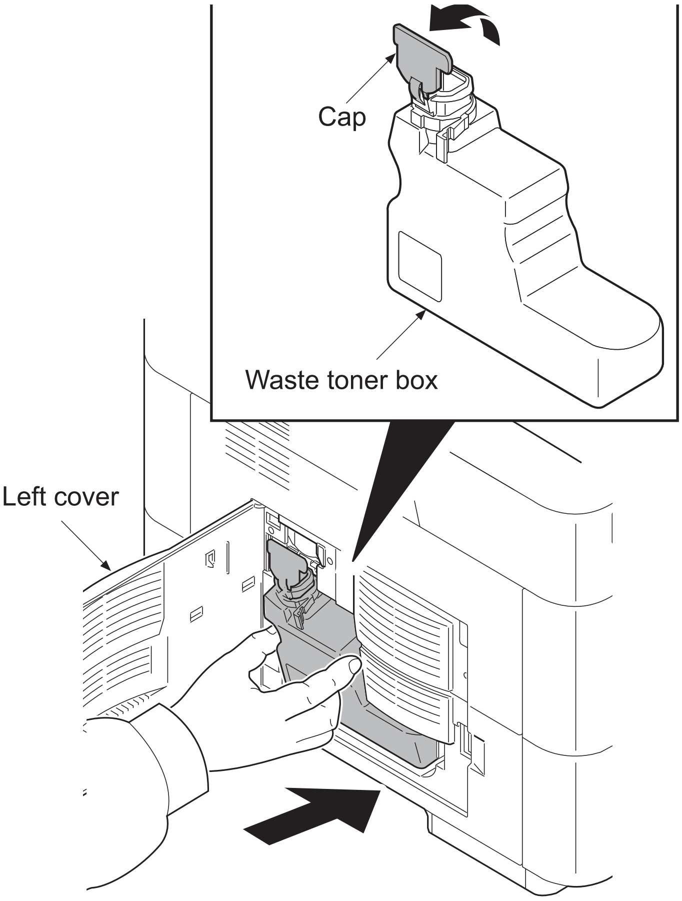

Cap
Waste toner box
Left cover

Figure 1-2-9

Setting of the fuser pressure release lever (40 ppm model only)

1. Open the rear cover.
2. Push the release lever down for changing the lever position to a normal position from a shipment position.
3. Close the rear cover.

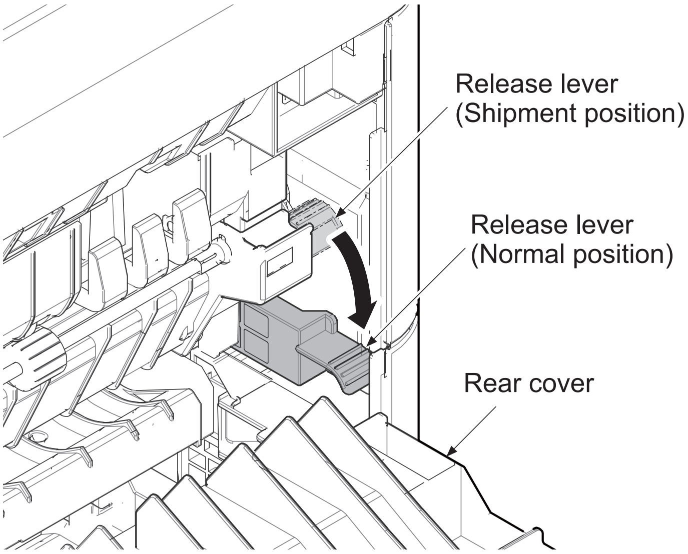

Release lever
(Shipment position)
Release lever
(Normal position)
Rear cover

Figure 1-2-10

Loading paper

1. Pull the cassette from the printer out.

(40 ppm model only)
2. Push the bottom plate down.

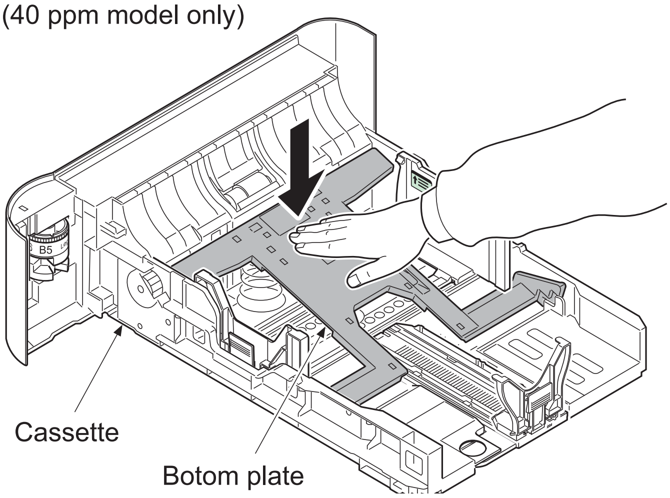

(40 ppm model only)
B5
Cassette
Botom plate

Figure 1-2-11

(Common)
3. Turn the cassette size dial so that the size of the paper you are going to use appears in the cassette size window.

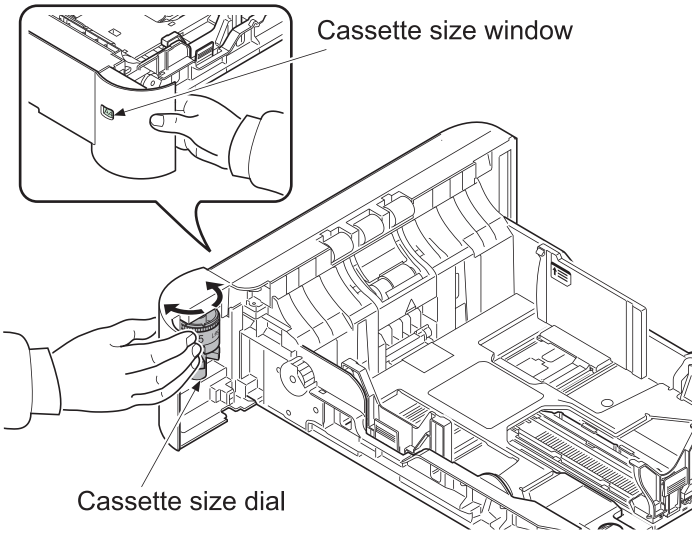

Cassette size window
Cassette size dial

Figure 1-2-12

4. Push the lock lever on the left side guide and slide to the desired paper size.

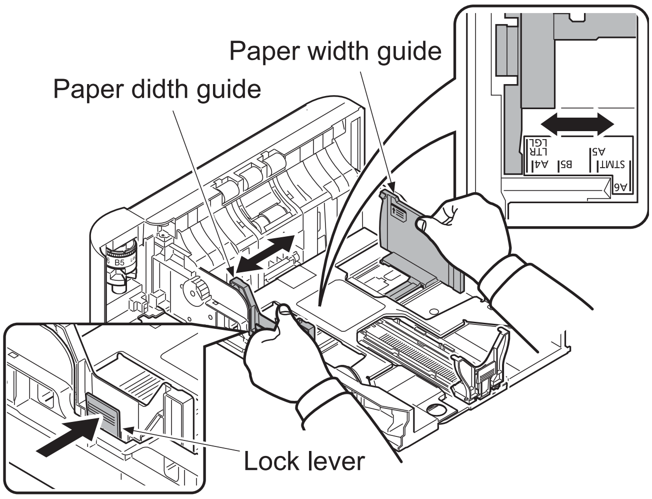

Paper width guide
Paper didth guide
B5
Lock lever

Figure 1-2-13

5. Push the lock lever and slide the paper length guide to the desired paper size.

   If you are going to set paper that is longer than A4, pull out the extension cassettes pushing the lock button one by one and adjust them to the desired paper size.

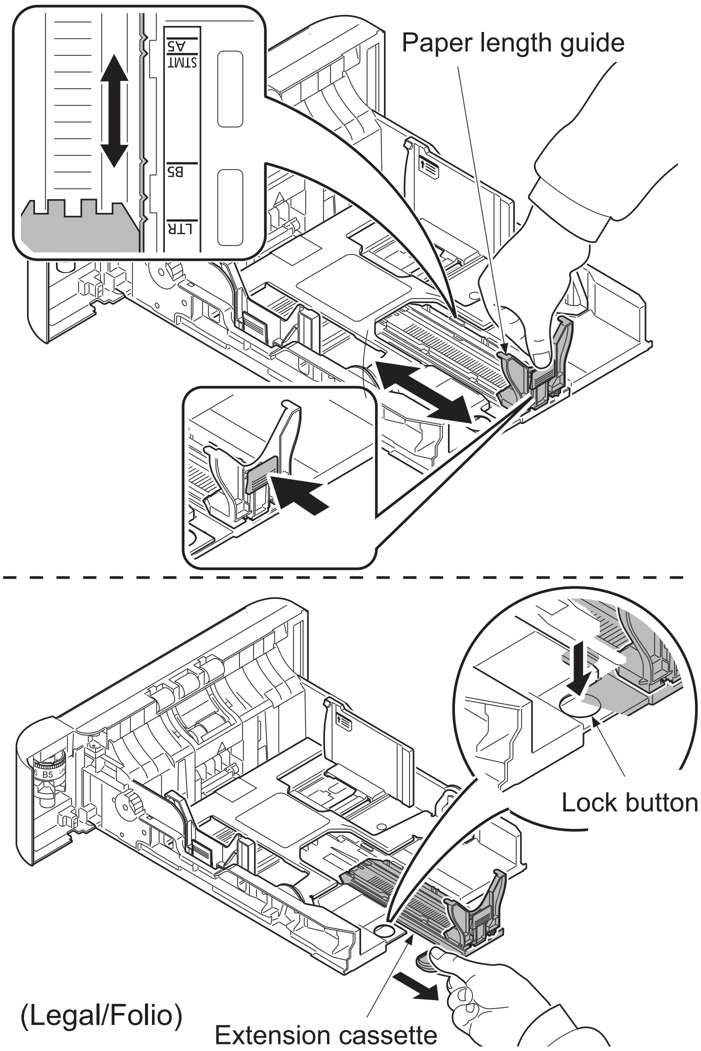

STMT
A5
B5
LTR
Paper length guide
Lock button
(Legal/Folio)
Extension cassette

Figure 1-2-14

6. Fan the media (paper/transparencies), then tap it on a level surface to avoid media jams or skewed printing.
7. Slide the paper into the paper cassette.
8. Insert the cassette into the slot in the printer. Push it straight in as far as it will go.

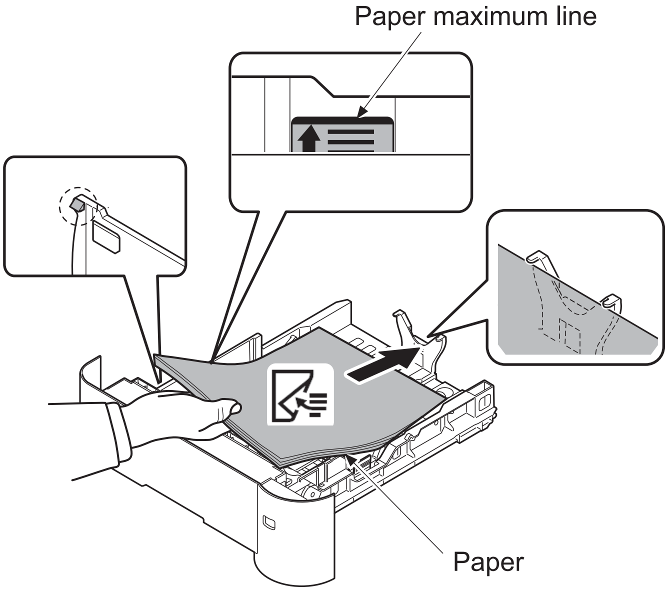

Paper maximum line
Paper

Figure 1-2-15

Replace the operation panel sheet (except 240V AC model)

1. Rotate the operation panel ring in the counterclockwise direction.
2. Remove the operation panel cover.
3. Replace it to the operation panel sheet of the corresponding language.
4. Refit all the removed parts.

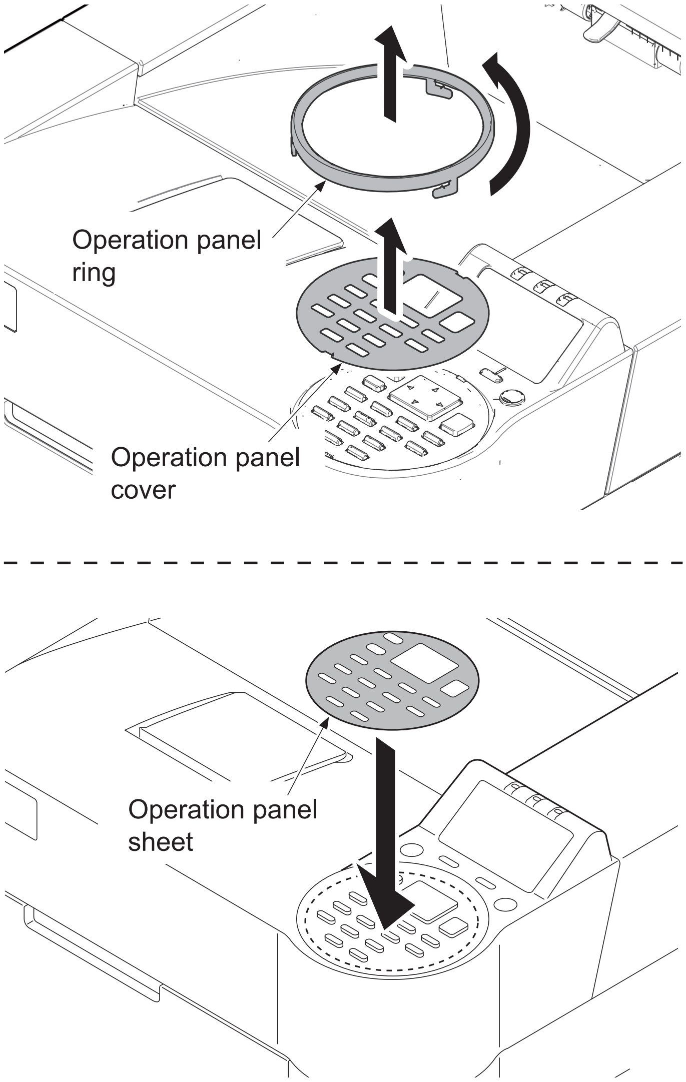

Operation panel ring
Operation panel cover
Operation panel sheet

Figure 1-2-16

5. Stick the language sheet of the corresponding language.

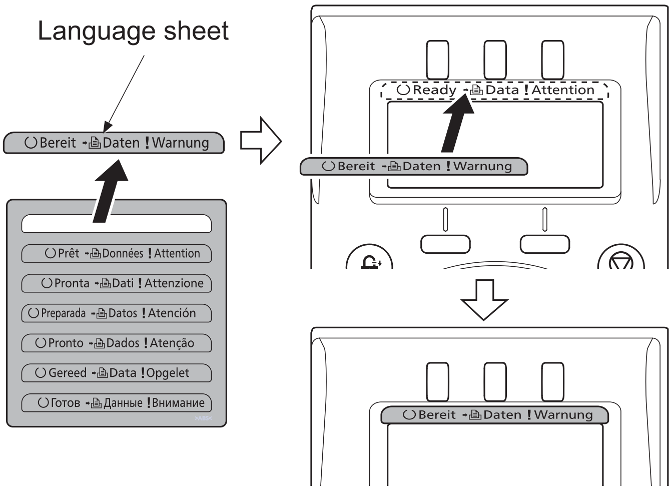

Language sheet
Bereit Daten Warnung
Prêt Données Attention
Pronta Dati Attenzione
Preparada Datos Atención
Pronto Dados Atenção
Gereed Data Opgelet
Готов Данные Внимание
Ready Data Attention
Bereit Daten Warnung
Bereit Daten Warnung

Figure 1-2-17

Connecting the cable

1. Open the rear cover.
2. Remove the inlet cover.
3. Connect the USB interface cable to the printer and PC.

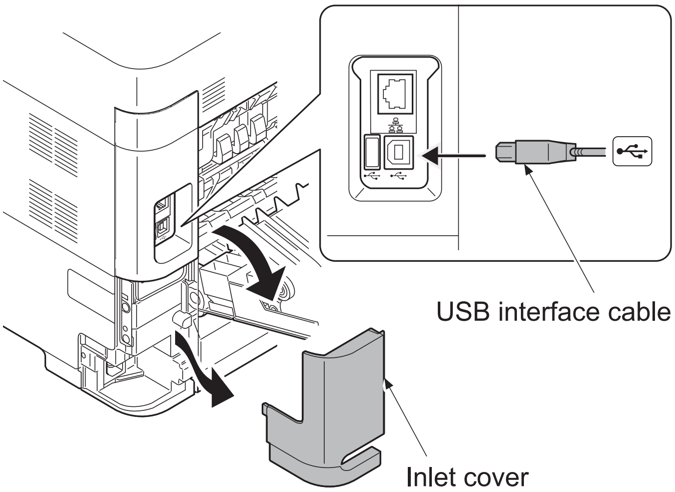

USB interface cable
Inlet cover

Figure 1-2-18

4. Connect the network interface cable to the printerand network.

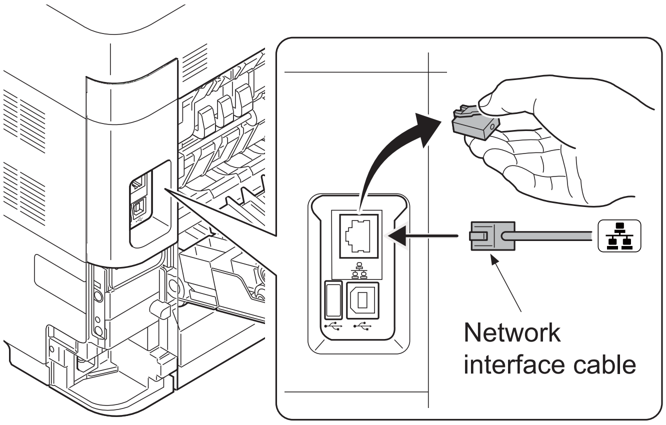

Network
interface cable

Figure 1-2-19

5. Connect the power cord to the printer and the wall outlet.
6. Refit the inlet cover.
7. Close the rear cover.

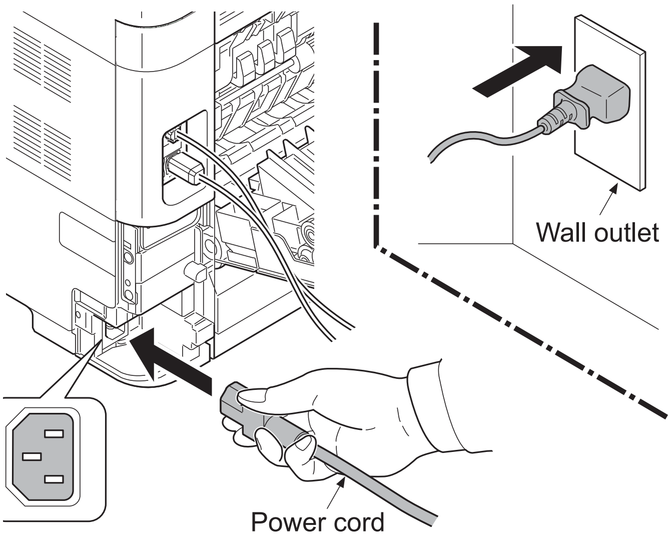

Wall outlet
Power cord

Figure 1-2-20

Power on

8. Press the power switch and then check the lighting up of ready indicator.
9. Installing the printer driver (refer to operation guide).

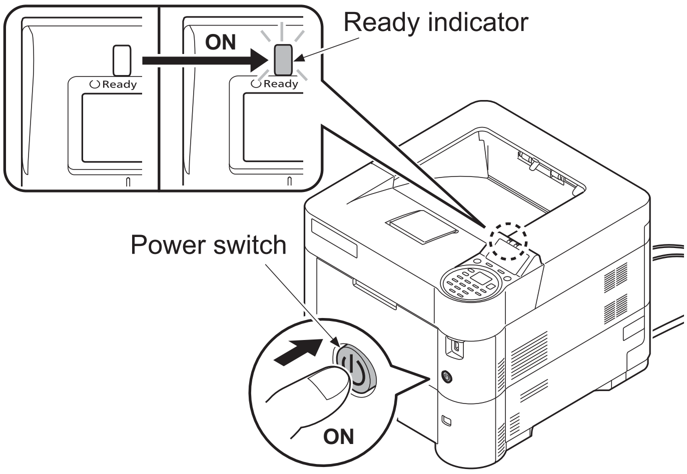


Figure 1-2-21

Setting the language

1. Press the menu key.
2. Select [Device Common] using the cursor up/down keys.
3. Press the OK key.
4. Select [Language] using the cursor up/down keys.
5. Press the OK key.
6. Select the language to set using the cursor up/down keys.
7. Press the OK key.

Printout the status page

1. Press the menu key.
2. Select [Report Print] using the cursor up/down keys.
3. Press the OK key.
4. Select [Status Page] using the cursor up/down keys.
5. Press the OK key.
6. Select the [YES] using the left select key.
7. [Accepted] is displayed and the page will be printed.
8. Press the menu key.

Completion of the machine installation

1-2-3 Install the expansion memory (option)

Procedure

1. Remove the inlet cover.
2. Remove the slot cover.
3. Unplug the power cable.

   Caution: Do not insert or remove main PWB assembly while machine power is on.
   Doing so may cause damage to the machine and the main PWB.

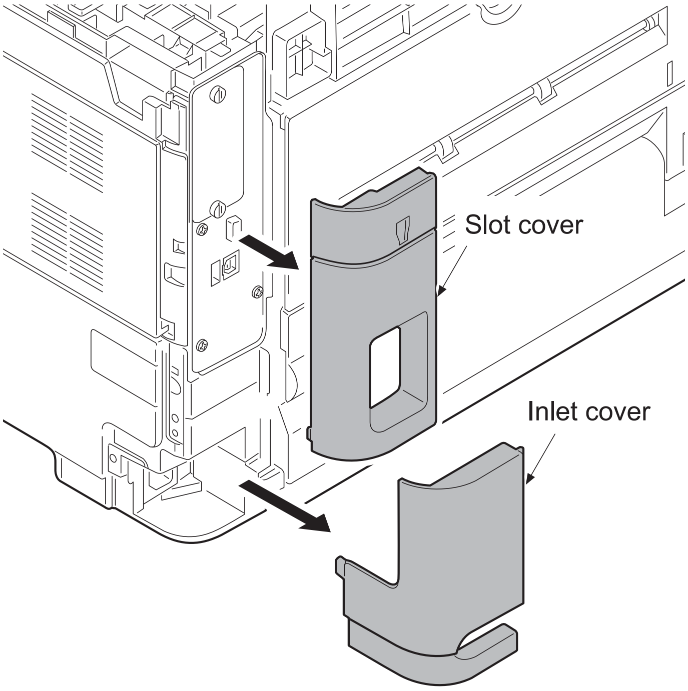


Figure 1-2-22

4. Remove five screws and then remove the main PWB assembly.
5. Aligning the cutouts of the memory module with the matching keys of the socket, carefully plug the memory module into the memory socket until it clicks in place.
6. Then, push down the memory module to secure.
7. Refit the main PWB assembly and the screws.
8. Refit the covers.
9. Plug the printer into a power outlet.
10. Print a status page to check the memory expansion. (See page 1-3-2)
    If memory expansion has been properly performed, information on the installed memory is printed with the total memory capacity has been increased.
    Standard memory capacity 256 MB. *1

    *1: 40 ppm (without Metwork); 128MB

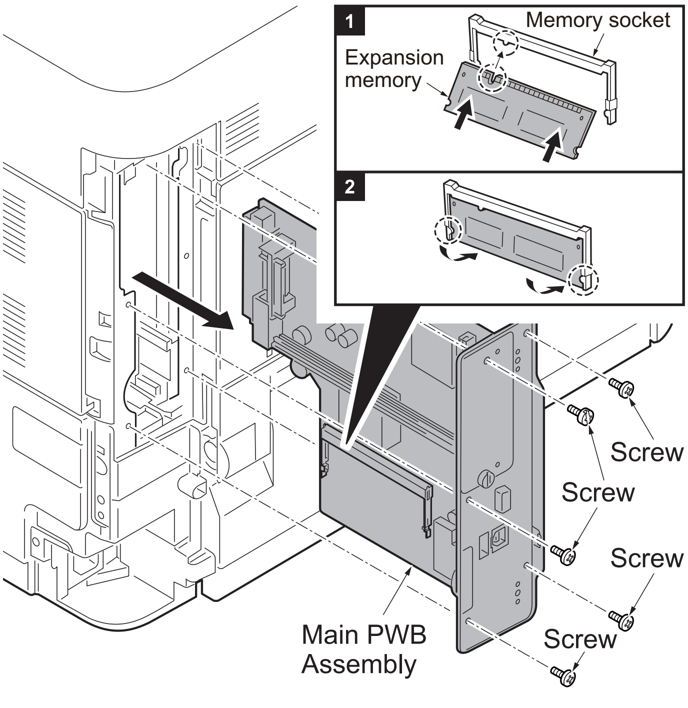
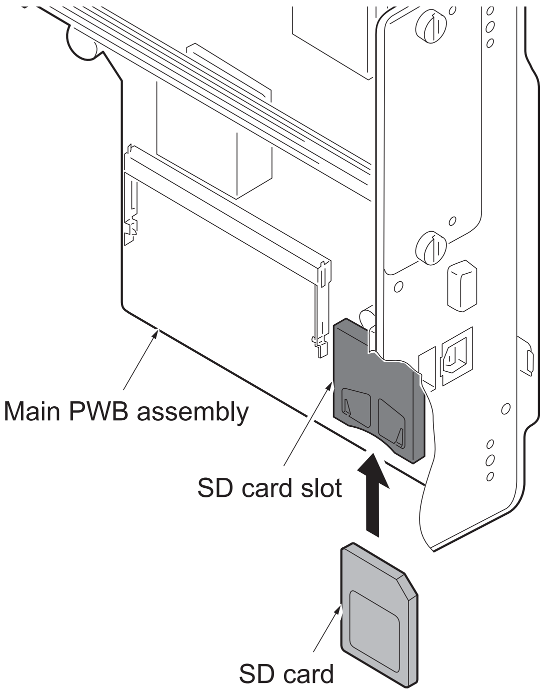


Figure 1-2-23

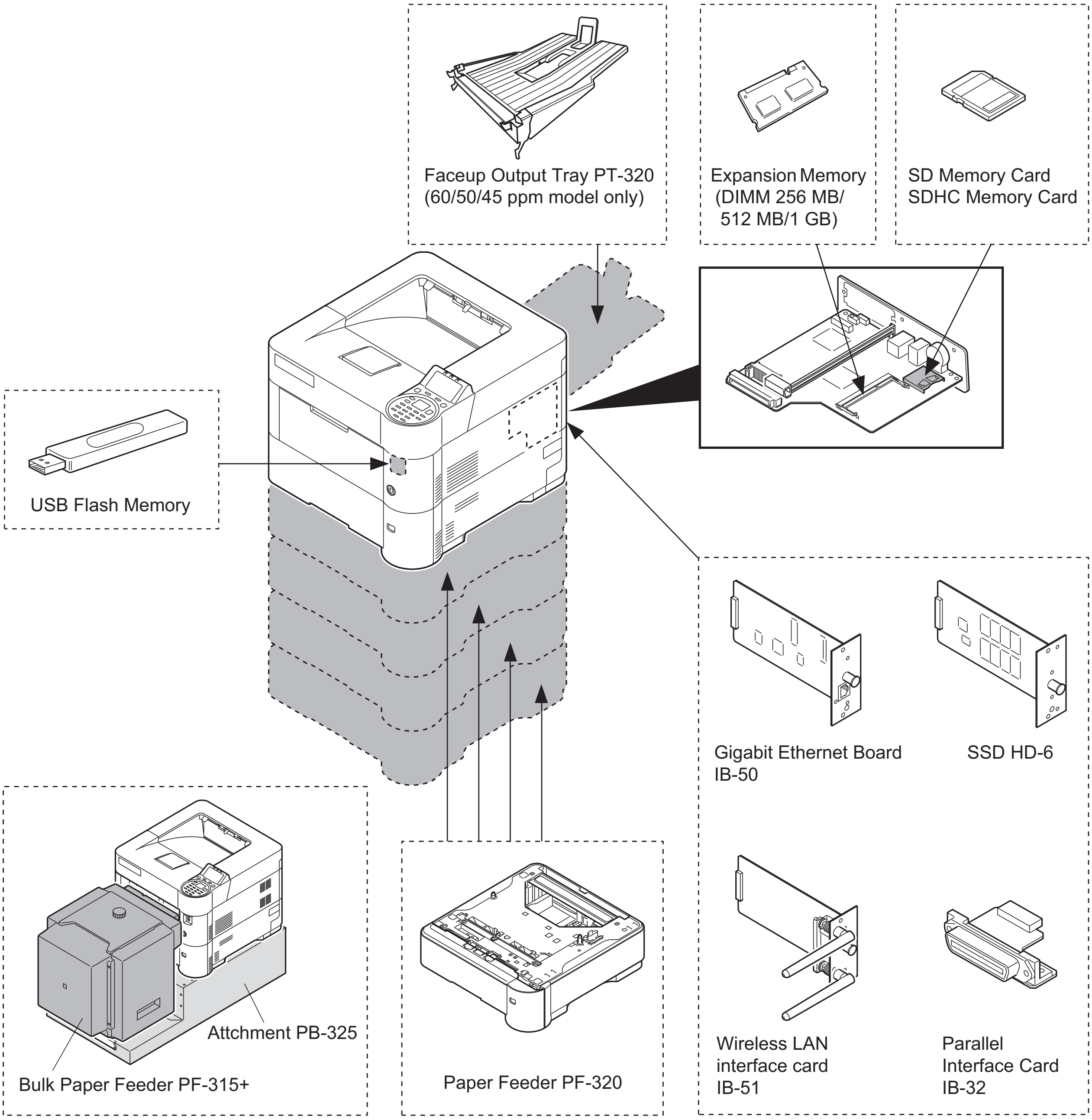
1-2-4 Install the memory card (SD card) (option)

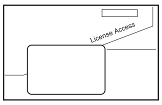
Procedure

1. Remove the main PWB assembly from the machine. (SeePage 1-2-12)
2. SD card is inserted in a SD card slot. Maximum memory capacity 32 GB.
3. Remove the main PWB assmbly and the covers.

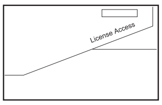

Main PWB assembly
SD card slot
SD card

1-2-5 Option composition

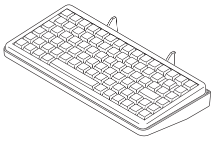

Faceup Output Tray PT-320
(60/50/45 ppm model only)
Expansion Memory
(DIMM 256 MB/
512 MB/1 GB)
SD Memory Card
SDHC Memory Card
USB Flash Memory
Gigabit Ethernet Board
IB-50
SSD HD-6
Attchment PB-325
Bulk Paper Feeder PF-315+
Paper Feeder PF-320
Wireless LAN
interface card
IB-51
Parallel
Interface Card
IB-32


License Access

Data security kit (E)


License Access

Card Authentication Kit (B)
IC card reader
Thin Print Kit UG-33

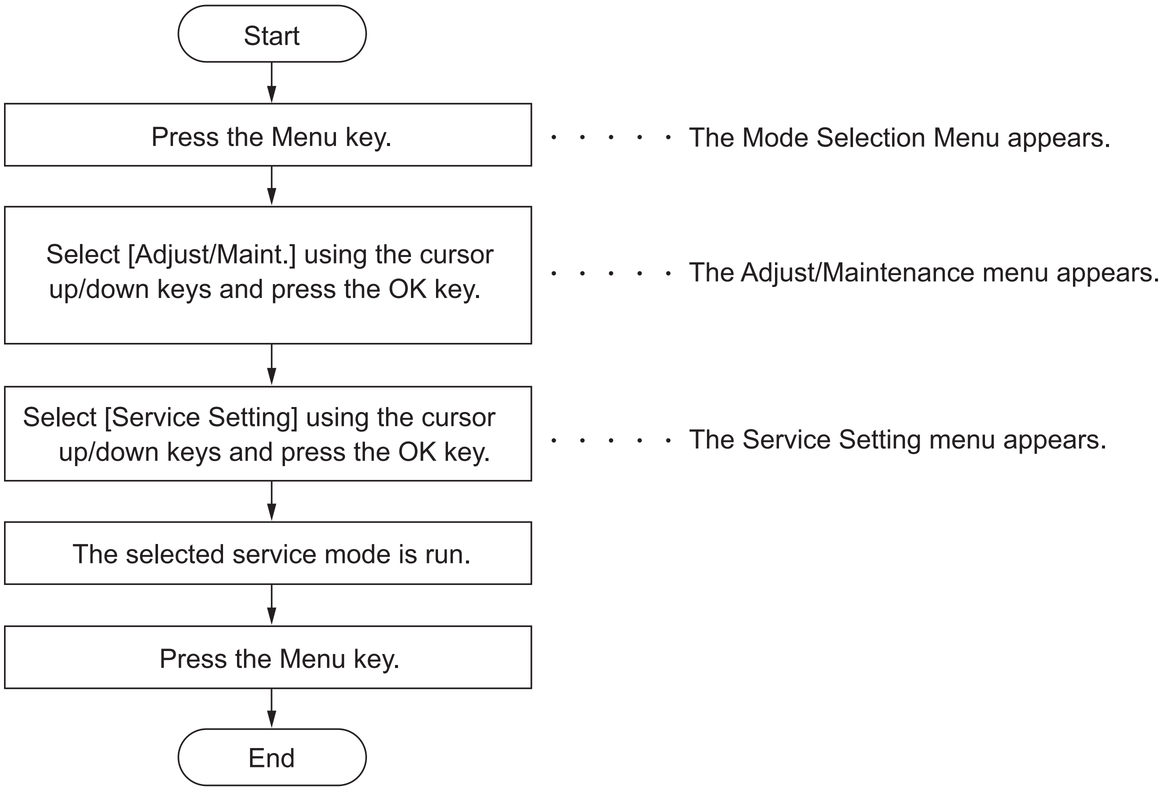


USB Keyboard

1-3-1 Service mode

The machine is equipped with a maintenance function which can be used to maintain and service the machine.

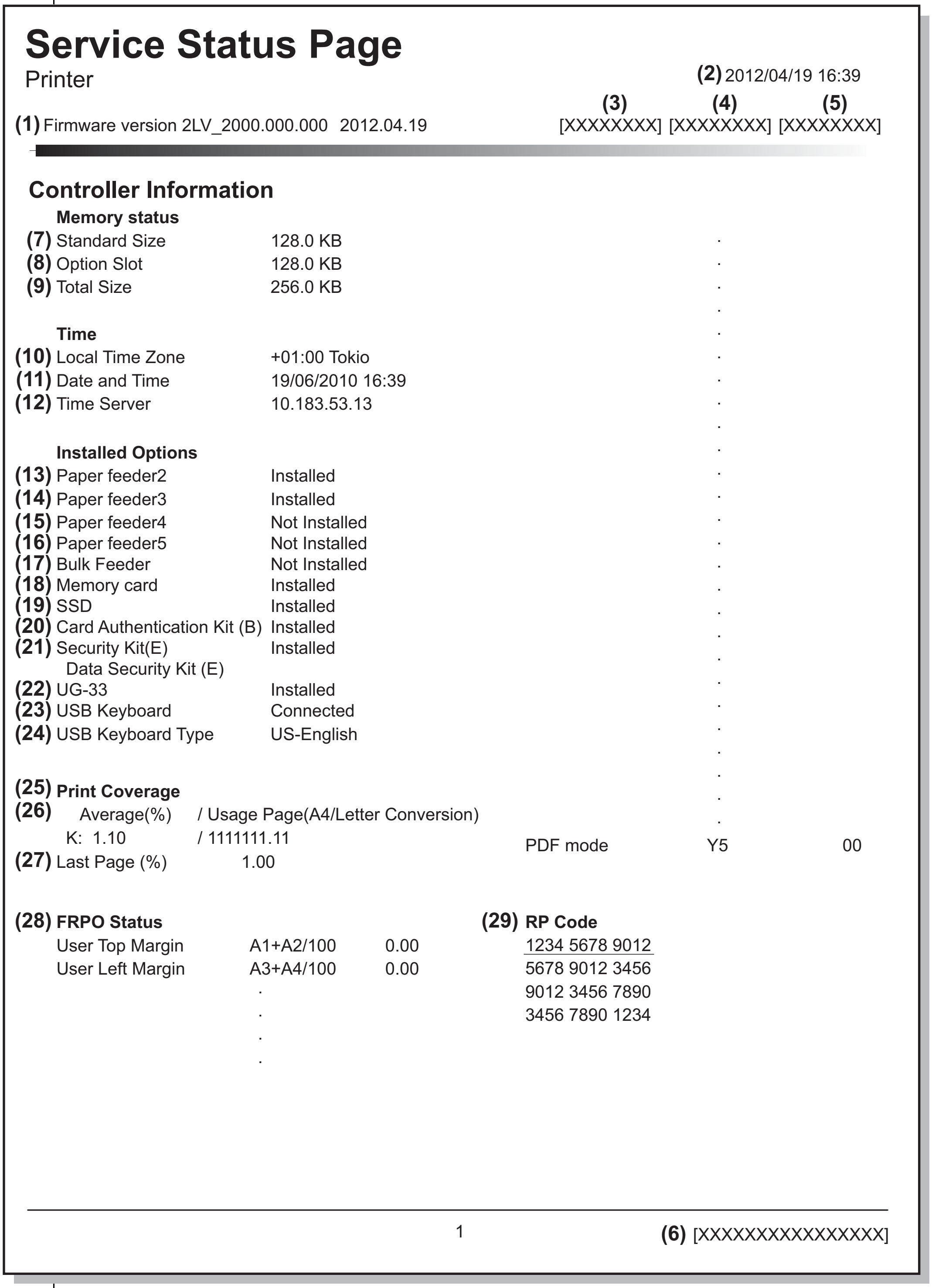
(1) Executing a service mode


Start
Press the Menu key.
· · · · · The Mode Selection Menu appears.
Select [Adjust/Maint.] using the cursor up/down keys and press the OK key.
· · · · · The Adjust/Maintenance menu appears.
Select [Service Setting] using the cursor up/down keys and press the OK key.
· · · · · The Service Setting menu appears.
The selected service mode is run.
Press the Menu key.
End

(2) Description of service mode

Service items	Description
Service Status	**Printing a status page for service purpose** **Description** Prints a status page for service purpose. The status page includes various settings and service cumulative. **Purpose** To acquire the current printing environmental parameters and cumulative information. **Method** 1. Enter the Service Setting menu. 2. Select [Status Page] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed and two pages will be printed.

Service items	Description
	Service status page (1)



Service Status Page

Printer

(2) 2012/04/19 16:39

(1) Firmware version 2LV_2000.000.000 2012.04.19

(3) [XXXXXXXX] (4) [XXXXXXXX] (5) [XXXXXXXX]

Controller Information

Memory status

(7)	Standard Size	128.0 KB
(8)	Option Slot	128.0 KB
(9)	Total Size	256.0 KB

Time

(10)	Local Time Zone	+01:00 Tokio
(11)	Date and Time	19/06/2010 16:39
(12)	Time Server	10.183.53.13

Installed Options

(13)	Paper feeder2	Installed
(14)	Paper feeder3	Installed
(15)	Paper feeder4	Not Installed
(16)	Paper feeder5	Not Installed
(17)	Bulk Feeder	Not Installed
(18)	Memory card	Installed
(19)	SSD	Installed
(20)	Card Authentication Kit (B)	Installed
(21)	Security Kit(E) Data Security Kit (E)	Installed
(22)	UG-33	Installed
(23)	USB Keyboard	Connected
(24)	USB Keyboard Type	US-English

(25) **Print Coverage**

(26) Average(%) / Usage Page(A4/Letter Conversion)

K: 1.10 / 1111111.11

(27) Last Page (%) 1.00

PDF mode Y5 00

(28) **FRPO Status**

User Top Margin	A1+A2/100	0.00
User Left Margin	A3+A4/100	0.00

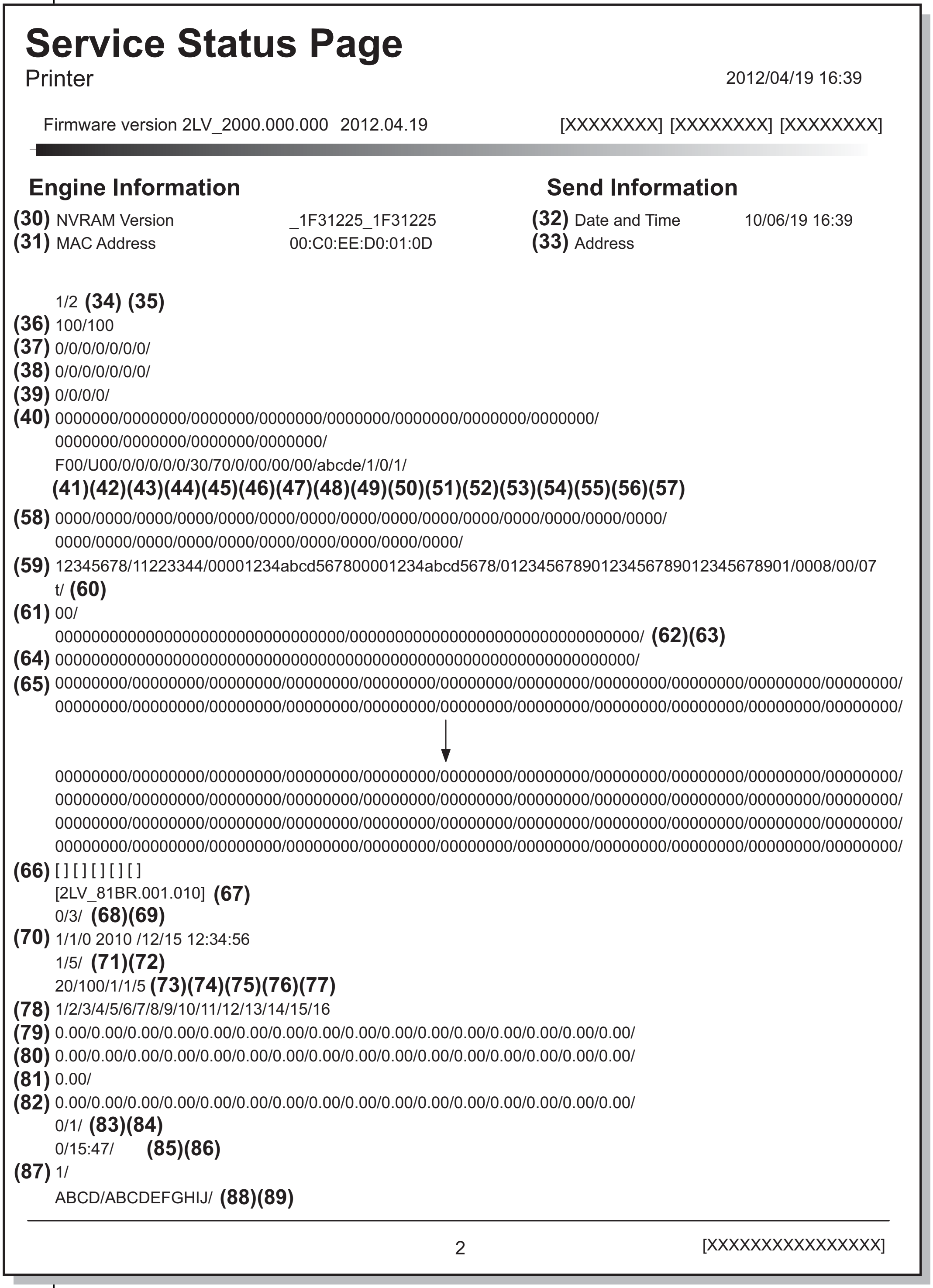
(29) **RP Code**

1234 5678 9012
5678 9012 3456
9012 3456 7890
3456 7890 1234

1 (6) [XXXXXXXXXXXXXXXX]

Figure 1-3-1

Service items	Description
	Service status page (2)



```
Service Status Page
Printer                                                          2012/04/19 16:39

  Firmware version 2LV_2000.000.000  2012.04.19      [XXXXXXXX] [XXXXXXXX] [XXXXXXXX]

Engine Information                                   Send Information
(30) NVRAM Version          _1F31225_1F31225         (32) Date and Time      10/06/19 16:39
(31) MAC Address            00:C0:EE:D0:01:0D        (33) Address

     1/2 (34) (35)
(36) 100/100
(37) 0/0/0/0/0/0/0/
(38) 0/0/0/0/0/0/0/
(39) 0/0/0/0/
(40) 0000000/0000000/0000000/0000000/0000000/0000000/0000000/0000000/
     0000000/0000000/0000000/0000000/
     F00/U00/0/0/0/0/0/30/70/0/00/00/00/abcde/1/0/1/
    (41)(42)(43)(44)(45)(46)(47)(48)(49)(50)(51)(52)(53)(54)(55)(56)(57)
(58) 0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/
     0000/0000/0000/0000/0000/0000/0000/0000/0000/0000/
(59) 12345678/11223344/00001234abcd567800001234abcd5678/012345678901234567890123456789 01/0008/00/07
     t/ (60)
(61) 00/
     00000000000000000000000000000000/00000000000000000000000000000000/ (62)(63)
(64) 0000000000000000000000000000000000000000000000000000000000000000/
(65) 00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
     00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
                                          ↓
     00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
     00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
     00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
     00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/00000000/
(66) [ ] [ ] [ ] [ ] [ ]
     [2LV_81BR.001.010] (67)
     0/3/ (68)(69)
(70) 1/1/0 2010 /12/15 12:34:56
     1/5/ (71)(72)
     20/100/1/1/5 (73)(74)(75)(76)(77)
(78) 1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16
(79) 0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/
(80) 0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/
(81) 0.00/
(82) 0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/0.00/
     0/1/ (83)(84)
     0/15:47/      (85)(86)
(87) 1/
     ABCD/ABCDEFGHIJ/ (88)(89)

                                      2                          [XXXXXXXXXXXXXXXX]
```

Figure 1-3-2

Service items	Description
	Detail of service status page

No.	Description	Supplement
(1)	Firmware version	-
(2)	System date	-
(3)	Engine soft version	-
(4)	Engine boot version	-
(5)	Operation panel mask version	-
(6)	Machine serial number	-
(7)	Standard memory size	-
(8)	Optional memory size	-
(9)	Total memory size	-
(10)	Local time zone	-
(11)	Report output date	Day/Month/Year hour:minute
(12)	NTP server name	-
(13)	Presence or absence of the optional paper feeder 1	Installed/Not Installed
(14)	Presence or absence of the optional paper feeder 2	Installed/Not Installed
(15)	Presence or absence of the optional paper feeder 3	Installed/Not Installed
(16)	Presence or absence of the optional paper feeder 4	Installed/Not Installed
(17)	Presence or absence of the optional bulk feeder	Installed/Not Installed
(18)	Presence or absence of the optional memory card	Installed/Not Installed
(19)	Presence or absence of the optional SSD	Installed/Not Installed
(20)	Presence or absence of the optional Card Authentication Kit(B)	Installed/Not Installed/Trial
(21)	Presence or absence of the optional Security Kit(E)	Installed/Not Installed
(22)	Presence or absence of the optional UG-33	Installed/Not Installed
(23)	The connection state of an optional USB Keyboard	Connected/Not Connected
(24)	Displays setting of optional USB Keyboard	US English/US English with Euro/German/French

Service items	Description
	Detail of service status page

No.	Description	Supplement
(25)	Page of relation to the A4/Letter	* :Print Coverage provides a close-matching reference of toner consumption and will not match with the actual toner consumption.
(26)	Average coverage for printer	Black
(27)	Coverage on the final output page	-
(28)	FRPO setting	-
(29)	RP Code	Code the engine software version and the date of update. Code the main software version and the date of update. Code the engine software version and the date of the previous update. Code the main software version and the date of the previous update.
(30)	NV RAM version	_ 1F3 1225 _ 1F3 1225 (a) (b) (c) (d) (e) (f) (a) Consistency of the present software version and the database _ (underscore): OK * (Asterisk): NG (b) Database version (c) The oldest time stamp of database version (d) Consistency of the present software version and the ME firmware version _ (underscore): OK * (Asterisk): NG (e) ME firmware version (f) The oldest time stamp of the ME database version Normal if (a) and (d) are underscored, and (b) and (e) are identical with (c) and (f).
(31)	Mac address	-
(32)	The last sent date and time	-
(33)	Transmission address	-
(34)	Destination information	-
(35)	Area information	-
(36)	Margin settings	Top margin/Left margin
(37)	Top offset for each paper source	MP tray/Paper feeder 1/Paper feeder 2/ Paper feeder 3/Paper feeder 4/Duplex/Page rotation
(38)	Left offset for each paper source	MP tray/Paper feeder 1/Paper feeder 2/ Paper feeder 3/Paper feeder 4/Duplex/Page rotation
(39)	L value settings	Top margin integer part / Top margin decimal part/ Left margin integer part / Left margin decimal part/

Service items	Description

No.	Description	Supplement
(40)	Life counter (The first line)	Machine life/MP tray/Cassette/Paper feeder 1/ Paper feeder 2/Paper feeder 3/Paper feeder 4/Duplex
	Life counter (The second line)	Bulk Feeder counter/Drum counter K/ Developer counter K/Maintenance kit counter
(41)	Panel lock information	F00: OFF F01: Partial Lock 1 F02: Partial Lock 2 F03: Partial Lock 3 F04: Full Lock
(42)	USB information	U00: Not installed/U01: Full speed/U02: Hi speed
(43)	Paper handling information	0: Paper source unit select/1: Paper source unit
(44)	Auto cassette change	0: OFF/ 1: ON
(45)	Black and white printing double count mode	0: All single counts 3: Folio, Single count, Less than 330 mm (length) *: The count mode can be changed using a PRESCRIBE command. When the double count is set for the paper other than the sizes of A4, B5, A5, Folio, Legal, Letter, and Statement, the counter value is indicated as "Other 1" in the status page. When in the same way, the single count is set, the counter value is indicated as "Other 2". In the operation panel, the counter values are indicated as "Other 1" or "Other 2".
(46)	Billing counting timing	-
(47)	Temperature (machine inside)	-
(48)	Temperature (machine outside)	-
(49)	Relative humidity (machine outside)	-
(50)	Absolute humidity (machine outside)	-
(51)	XLI calibration information	-
(52)	Beam A/BD synchronous fine-tuning value	-
(53)	Beam B/BD synchronous fine-tuning value	-
(54)	Fixed assets number	-
(55)	Job end judgment time-out time	-
(56)	Job end detection mode	-
(57)	PRESCRIBE environmental reset	-

Service items	Description

No.	Description	Supplement
(58)	Media type attributes 1 to 28 (Not used: 18, 19, 20) * : For details on settings, refer to MDAT command in “Prescribe Commands Reference Manual.	Weight settings 0: Light 1: Normal 1 2: Normal 2 3: Normal 3 4: Heavy 1 5: Heavy 2 6: Heavy 3 7: Extra Heavy Fuser settings 0: High 1: Middle 2: Low 3: Vellum Duplex settings 0: Disable 1: Enable
(59)	RFID information	Product (OEM/maker) / destination code / a toner name / lot number / toner capacity / toner empty information / number of times of toner refilling
(60)	Toner install mode information	0:OFF t:ON
(61)	Drum status	-
(62)	Drum surface potential	-
(63)	Drum density	-
(64)	LSU light volume distribution	-
(65)	DRT parameter coefficient	-
(66)	Soft version of the optional paper feeder	Paper feeder 1/Paper feeder 2/Paper feeder 3 Paper feeder 4
(67)	Version of the optional message	-
(68)	Altitude	0: Standard 1: High altitude 1 2: High altitude 2
(69)	Charger roller correction	1 to 5
(70)	Data Sanitization details result	-
(71)	Toner Low setting	0:Invalid 1: Effective
(72)	Toner Low detection level	5 to 100(%)
(73)	Number of page that swept out at any time (SP1)	1 to 65535
(74)	Number of page that swept out at instancy (SP2)	1 to 65535
(75)	The practice standard printing rate of development TC (SGE)	0 to 15
(76)	The practice standard printing rate according to area TC (SDR)	0 to15

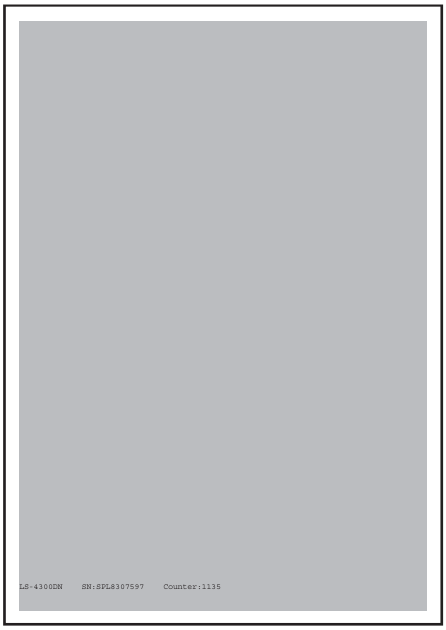
Service items	Description

No.	Description	Supplement
(77)	The number of times of enforcement of the development TC	-
(78)	The number of times of enforcement according to area	-
(79)	The last page printing rate of each area	0.00 to 100.00(%)
(80)	The average printing rate of each area	0.00 to 100.00(%)
(81)	The average printing rate for the 1000 past	0.00 to 100.00(%)
(82)	The average printing rate for the 1000 past of each area	0.00 to 100.00(%)
(83)	ErP application	0: ErP Un-Applying mode 1: ErP Application mode
(84)	Full page printing mode	0:Normal mode (The factory default settings) 1:Full page mode
(85)	Wake UP mode	0: OFF (Don't wake up) 1: ON (Do wake up)
(86)	Wake Up Timer	Displays the wake-up time
(87)	BAM conformity Mode setting	0: Un-suiting Mode 1: Conformity Mode
(88)	Drum ID	-
(89)	Drum serial number	-

Code conversion

A	B	C	D	E	F	G	H	I	J
0	1	2	3	4	5	6	7	8	9

Service items	Description
Network Status	**Printing a status page for network** **Description** Prints a status page for network. Execution is possible only the model with network. **Purpose** To acquire the detailed network setting information. **Method** 1. Enter the Service Setting menu. 2. Select [Network Status] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed and Network status page will be printed.
OP Network Status	**Printing a status page for optional network** **Description** Prints a status page for optional network. Execution is possible only the model with optional network. **Purpose** To acquire the detailed network setting information. **Method** 1. Enter the Service Setting menu. 2. Select [OP Network Status] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed and Network status page will be printed.

Service items	Description
Test Page	**Printing a test page** **Description** The test page is printed with halftones. **Purpose** To check the activation of the developer and drum units. **Method** 1. Enter the Service Setting menu. 2. Select [Test Page] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed and Test page will be printed.  **Figure 1-3-3**

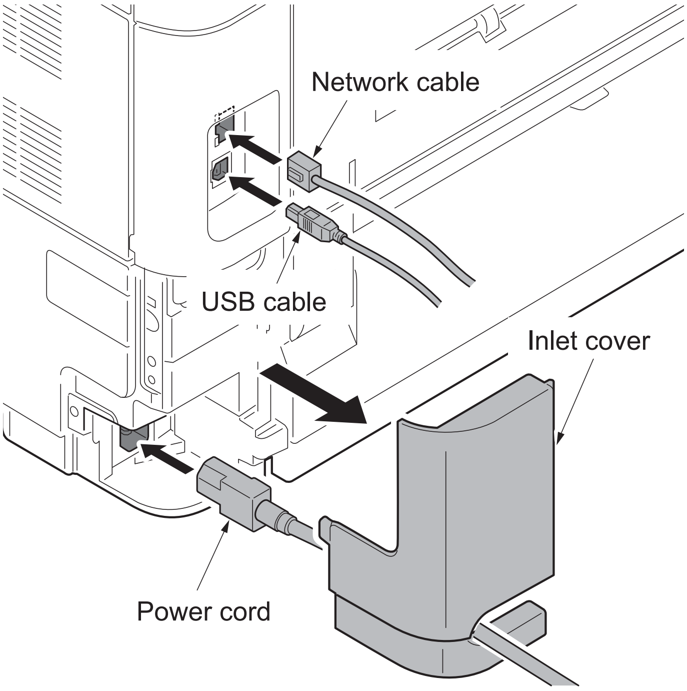
Service items	Description
Maintenance	**Counter reset for the maintenance kit** **Description** The "Install MK" message means that maintenance kit should be replaced at fixed pages of printing. The interval counter must be manually reset using this service item. Maintenance kit MK-3102 (for 120 V) (40 ppm) :300,000 images Maintenance kit MK-3132 (for 120 V) (60/50/45 ppm) :500,000 images Maintenance kit MK-3100 (for 230 V) (40 ppm) :300,000 images Maintenance kit MK-3130 (for 230 V) (60/50/45 ppm) :500,000 images Maintenance kit includes the following units: Drum unit Developer unit Transfer roller assembly Fuser unit Paper feed roller assembly Retard roller assembly **Purpose** To reset the life counter for maintenance kit. **Method** Drum unit (see page 1-5-15) Developer unit (see page 1-5-13) Transfer roller assembly (see page 1-5-16) Fuser unit (see page 1-5-19) Paper feed roller assembly (see page 1-5-8) Retard roller assembly (see page 1-5-8) **Method** 1. Enter the Service Setting menu. 2. Select [Maintenance] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Completed] is displayed. The counter for each component is reset immediately. **Note:** Occurrences of resetting the maintenance kits are recorded on the service status page or event log in number of pages at which the maintenance kit was replaced (see page 1-3-2, page 1-3-18). This may be used to determine the possibility that the counter was errorneously or unintentionally reset.

Service items	Description
New Developer	**Initializing the developing unit (toner install mode)** **Description** The new developing unit is shipped from the factory with no toner contained. The developing unit can be automatically replete with toner when a toner container is installed onto it and the printer is turned on. However, because the toner reservoir in the developing unit has a large capacity, it requires a lengthy period of time until a substantial amount of toner has been fed to get the printer ready. (A new developing unit needs approximately 200 g for triggering the sensor inside.) **Purpose** To execute when the developing unit has been replaced. **Method** 1. Enter the Service Setting menu. 2. Select [New Developer] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. [Accepted] is displayed. The toner installation is performed when power is turned on and off. NOTE: Toner supply is stopped when toner installation mode is performing.
Auto Drum Refresh	**Automatic drum surface refreshing** **Description** The drum surface refreshing operation is normally performed when the power is turned on to the printer or during warm-up when the printer is recovering from the Sleep mode, but even then only at those times that the temperature/humidity sensor detects the drum surface to be in a state of dew condensation. By using this mode, it is possible to force the drum surface refreshing operation to be performed automatically at a predetermined period of time, regardless of the status detected by the temperature/humidity sensor. **Purpose** To prevent bleeding of the output image when the printer's operating environment is one of high humidity. **Method** 1. Enter the Service Setting menu. 2. Select [Auto Drum Refresh] using the cursor up/down keys. 3. Press the OK key. 4. Select the desire mode (Off/Short/Standard/Long) using the cursor up/down keys. 5. Press the OK key. The new value is set.

Service items	Description
Drum heater (110V only)	**Setting drum heater** **Description** "On/Off" of a drum heater is set up. If it sets to "ON", drum refresh time will become short. **Purpose** In order to improve the picture blot by high humidity. **Method** 1. Enter the Service Setting menu. 2. Select [Drum heater] using the cursor up/down keys. 3. Press the OK key. 4. Select [Off] or [On] using the cursor up/down keys. 5. Press the OK key. The setting is set.
Drum	**Drum surface refreshing** **Description** Rotates the drum approximately 3 minutes with toner lightly on the overall drum using the high-voltage output control. The cleaning blade in the drum unit scrapes toner off the drum surface to clean it. **Purpose** To clean the drum surface when image failure occurs due to the drum. This mode is effective when dew condensation on the drum occurs. **Method** 1. Enter the Service Setting menu. 2. Select [Drum] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. Drum surface refreshing will start.
Write Data	**Write data (USB memory data write)** **Description** To write data into a USB memory. Execution is possible only when a USB memory is detected. **Method** Install the USB memory before attempting to write data. 1. Enter the Service Setting menu. 2. Select [Write Data] using the cursor up/down keys. 3. Press the OK key. 4. Select the [YES] using the left select key. 5. [Data waiting] is displayed and the printer waits for data to be written. 6. When the data is sent, [Processing] appears and the data is written to USB memory. When data writing ends, the display returns to [Ready].

Service items	Description
Altitude adj.	**Setting altitude adjustment** **Description** Sets the altitude adjustment mode. **Purpose** Used when print quality deteriorates in an installation at the altitude of 1,500 meters or higher. **Method** 1. Enter the Service Setting menu. 2. Select [Altitude Adj.] using the cursor up/down keys. 3. Press the OK key. 4. Select [Normal], [High 1] or [High 2] using the cursor up/down keys. 5. Press the OK key. The setting is set.
MC	**Setting main charger output** **Description** Sets the main charger output. Execution is possible only when the altitude adjustment mode is set to [Normal]. **Purpose** Execute when the image density declines, dirt of a background or an offset has occurred. **Method** 1. Enter the Service Setting menu. 2. Select [MC] using the cursor up/down keys. 3. Press the OK key. 4. Select [1] to [5] using the cursor up/down keys. 5. Press the OK key. The setting is set.

(3) Printing an event log

Service items	Description
Printing an event log	**Printing an event log (EVENT LOG)** **Description** Prints a history list of occurrences of paper jam, self-diagnostics, toner replacements, etc. **Purpose** To allow machine malfunction analysis based on the frequency of paper misfeeds, self diagnostic errors and replacements. **Method** 1. Connect the USB or network cable between machine and PC (network). 2. Remove the inlet cover and connect the power cord.  **Figure 1-3-4** 3. Refit the inlet cover. 4. Turn the main power switch on. Make sure the machine is ready. 5. Send the following PRESCRIBE command sequence from the PC to the machine. `!R!KCFG"ELOG";EXIT;` 6. A sheet of event log will be printed. **Completion**

Service items	Description
Printing an event log	**Remarks: Details of configurations (See above 5.)**

Notes on Connecting to USB

(1)Save the PRESCRIBE commands above as a text file in the PC.

(2)Select the Sharing tab of the printer properties and share the printer.

(3)Select a USB port in the Port tab. (Specify the printer name for sharing.)

(4)From the DOS Prompt, execute the following command line:

```
copy file-name\\computer-name\shared-printe
```

File-name should be the name of the file that was saved in step 1.

Notes on connecting via network (using FTP protocol)

(1)Save the PRESCRIBE commands above as a text file in the PC.

(2)From the DOS Prompt, execute the following command line:

```
ftp printer-IP-address
```

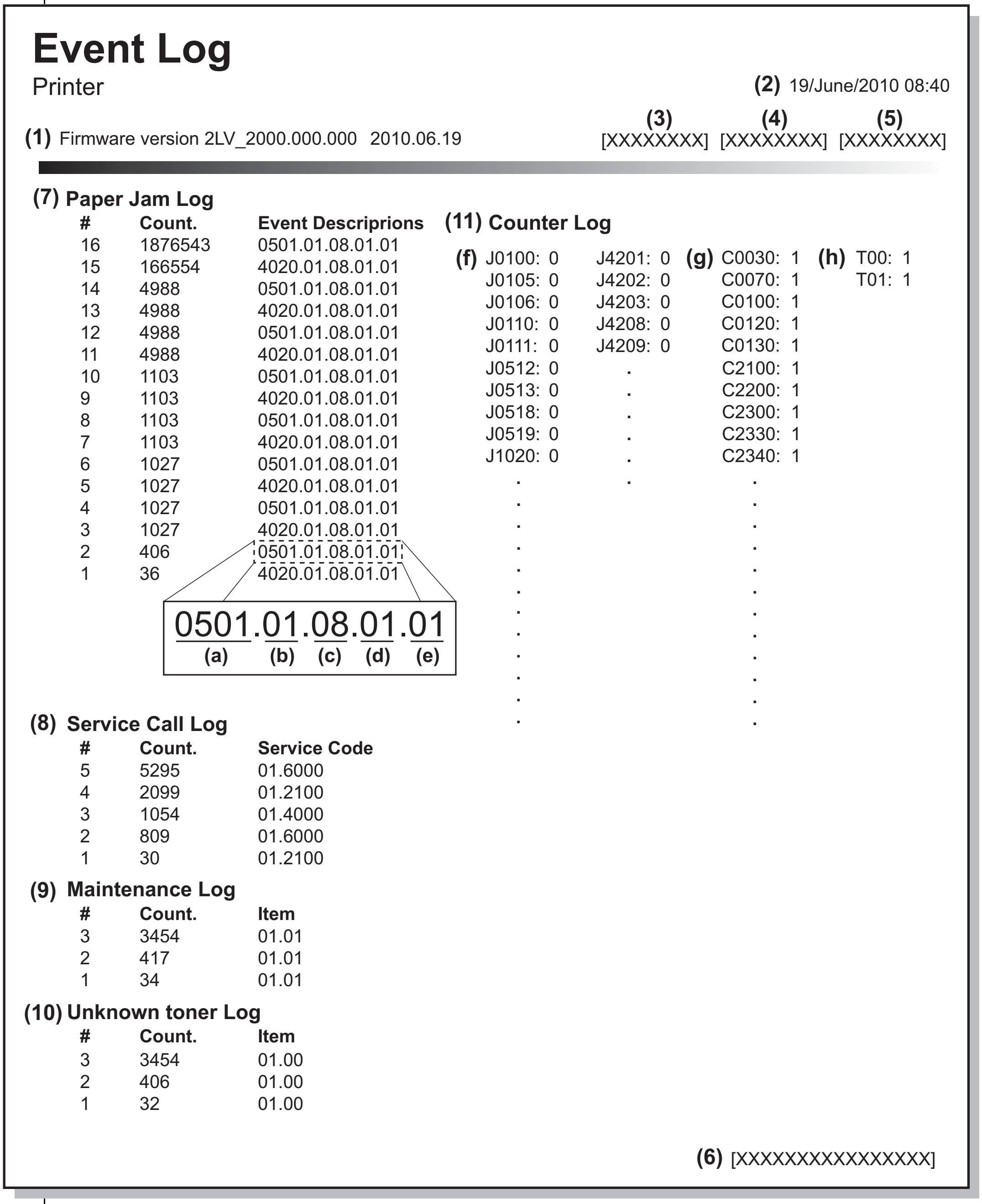
Do not specify user name and password.

(3)From the DOS Prompt, execute the following command:

```
put file-name
```

File-name should be the name of the file that was saved in step 1.

Service items	Description
	Event log



```
Event Log
Printer                                                        (2) 19/June/2010 08:40
                                                         (3)          (4)          (5)
(1) Firmware version 2LV_2000.000.000  2010.06.19   [XXXXXXXX]  [XXXXXXXX]  [XXXXXXXX]

(7) Paper Jam Log
     #    Count.     Event Descriprions    (11) Counter Log
     16   1876543    0501.01.08.01.01
     15   166554     4020.01.08.01.01      (f) J0100: 0   J4201: 0  (g) C0030: 1  (h) T00: 1
     14   4988       0501.01.08.01.01          J0105: 0   J4202: 0      C0070: 1      T01: 1
     13   4988       4020.01.08.01.01          J0106: 0   J4203: 0      C0100: 1
     12   4988       0501.01.08.01.01          J0110: 0   J4208: 0      C0120: 1
     11   4988       4020.01.08.01.01          J0111: 0   J4209: 0      C0130: 1
     10   1103       0501.01.08.01.01          J0512: 0       .         C2100: 1
     9    1103       4020.01.08.01.01          J0513: 0       .         C2200: 1
     8    1103       0501.01.08.01.01          J0518: 0       .         C2300: 1
     7    1103       4020.01.08.01.01          J0519: 0       .         C2330: 1
     6    1027       0501.01.08.01.01          J1020: 0       .         C2340: 1
     5    1027       4020.01.08.01.01             .           .            .
     4    1027       0501.01.08.01.01             .                        .
     3    1027       4020.01.08.01.01             .                        .
     2    406        0501.01.08.01.01             .                        .
     1    36         4020.01.08.01.01             .                        .
                                                  .                        .
            0501.01.08.01.01                      .                        .
             (a)  (b) (c) (d) (e)                 .                        .
                                                  .                        .
                                                  .                        .
                                                  .                        .
(8) Service Call Log                              .                        .
     #    Count.     Service Code
     5    5295       01.6000
     4    2099       01.2100
     3    1054       01.4000
     2    809        01.6000
     1    30         01.2100

(9) Maintenance Log
     #    Count.     Item
     3    3454       01.01
     2    417        01.01
     1    34         01.01

(10) Unknown toner Log
     #    Count.     Item
     3    3454       01.00
     2    406        01.00
     1    32         01.00

                                                       (6) [XXXXXXXXXXXXXXXXX]
```

Figure 1-3-5

Detail of event log

No.	Items	Description
(1)	System version	
(2)	System date	
(3)	Engine soft version	
(4)	Engine boot version	
(5)	Operation panel mask version	
(6)	Machine serial number	

Service items	Description

No.	Items	Description		
(7)	Paper Jam Log	#	Count.	Event
		Remembers 1 to 16 of occurrence. If the occurrence of the previous paper jam is less than 16, all of the paper jams are logged. When the occurrence excesseds 16, the oldest occurrence is removed.	The total page count at the time of the paper jam.	Log code (hexadecimal, 5 categories) (a) Cause of a paper jam (b) Paper source (c) Paper size (d) Paper type (e) Paper eject
		(a) Cause of paper jam (Hexadecimal)		
		Refer to page 1-4-1 for paper jam location 0000: Initial jam 0100: Secondary paper feed request time out 0101: Waiting for process package to be ready 0104: Waiting for conveying package to be ready 0106: Paper feeding request for duplex printing time out 0107: Waiting for fuser package to be ready 0120: Receiving a duplex paper feeding request while paper is empty 0121: Exceeding number of duplex pages circulated 0501: No paper feed of jam (cassette 1) 0502: No paper feed of jam (cassette 2) 0503: No paper feed of jam (cassette 3) 0504: No paper feed of jam (cassette 4) 0505: No paper feed of jam (cassette 5) 0508: No paper feed of jam (duplex section) 0509: No paper feed of jam (MP tray) 0511: Multiple sheets of jam (cassette 1) 0512: Multiple sheets of jam (cassette 2) 0513: Multiple sheets of jam (cassette 3) 0514: Multiple sheets of jam (cassette 4) 0515: Multiple sheets of jam (cassette 5) 0518: Multiple sheets of jam (duplex section) 0519: Multiple sheets of jam (MP tray) 0529: No paper feed of jam (bulk feeder) 0539: Multiple sheets of jam (bulk feeder) 1403: PF feed sensor 1 non arrival jam (cassette 3) 1404: PF feed sensor 1 non arrival jam (cassette 4) 1405: PF feed sensor 1 non arrival jam (cassette 5) 1413: PF feed sensor 1 stay jam (cassette 3) 1414: PF feed sensor 1 stay jam (cassette 4) 1415: PF feed sensor 1 stay jam (cassette 5)		

Service items	Description

No.	Items	Description
(7) cont.	Paper Jam Log	1604: PF feed sensor 2 non arrival jam (cassette 4) 1605: PF feed sensor 2 non arrival jam (cassette 5) 1614: PF feed sensor 2 stay jam (cassette 4) 1615: PF feed sensor 2 stay jam (cassette 5) 1805: PF feed sensor 3 non arrival jam (cassette 5) 1815: PF feed sensor 3 stay jam (cassette 5) 4002: Registration sensor 2 non arrival jam (cassette 2) 4003: Registration sensor 2 non arrival jam (cassette 3) 4004: Registration sensor 2 non arrival jam (cassette 4) 4005: Registration sensor 2 non arrival jam (cassette 5) 4012: Registration sensor 2 stay jam (cassette 2) 4013: Registration sensor 2 stay jam (cassette 3) 4014: Registration sensor 2 stay jam (cassette 4) 4015: Registration sensor 2 stay jam (cassette 5) 4101: Registration sensor 3 non arrival jam (cassette 1) 4102: Registration sensor 3 non arrival jam (cassette 2) 4103: Registration sensor 3 non arrival jam (cassette 3) 4104: Registration sensor 3 non arrival jam (cassette 4) 4105: Registration sensor 3 non arrival jam (cassette 5) 4108: Registration sensor 3 non arrival jam (duplex section) 4109: Registration sensor 3 non arrival jam (MP tray) 4111: Registration sensor 3 stay jam (cassette 1) 4112: Registration sensor 3 stay jam (cassette 2) 4113: Registration sensor 3 stay jam (cassette 3) 4114: Registration sensor 3 stay jam (cassette 4) 4115: Registration sensor 3 stay jam (cassette 5) 4118: Registration sensor 3 stay jam (duplex section) 4119: Registration sensor 3 stay jam (MP tray) 4201: Eject full sensor non arrival jam (cassette 1) 4202: Eject full sensor non arrival jam (cassette 2) 4203: Eject full sensor non arrival jam (cassette 3) 4204: Eject full sensor non arrival jam (cassette 4) 4205: Eject full sensor non arrival jam (cassette 5) 4208: Eject full sensor non arrival jam (duplex section) 4209: Eject full sensor non arrival jam (MP tray) 4211: Eject full sensor stay jam (cassette 1) 4212: Eject full sensor stay jam (cassette 2) 4213: Eject full sensor stay jam (cassette 3) 4214: Eject full sensor stay jam (cassette 4) 4215: Eject full sensor stay jam (cassette 5) 4218: Eject full sensor stay jam (duplex section) 4219: Eject full sensor stay jam (MP tray) 4301: Duplex sensor 1 non arrival jam (cassette 1) 4302: Duplex sensor 1 non arrival jam (cassette 2) 4303: Duplex sensor 1 non arrival jam (cassette 3) 4304: Duplex sensor 1 non arrival jam (cassette 4) 4305: Duplex sensor 1 non arrival jam (cassette 5) 4309: Duplex sensor 1 non arrival jam (MP tray or bulk feeder)

<table>
<tr><th>Service items</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>No.</th><th>Items</th><th colspan="3">Description</th></tr>
<tr><td rowspan="9">(7) cont.</td><td rowspan="9">Paper Jam Log</td><td colspan="3">4401: Duplex sensor 2 non arrival jam (cassette 1)
4402: Duplex sensor 2 non arrival jam (cassette 2)
4403: Duplex sensor 2 non arrival jam (cassette 3)
4404: Duplex sensor 2 non arrival jam (cassette 4)
4405: Duplex sensor 2 non arrival jam (cassette 5)
4409: Duplex sensor 2 non arrival jam (MP tray or bulk feeder)
4418: Duplex sensor 2 stay jam (duplex section)</td></tr>
<tr><td colspan="3">(b) Detail of paper source (Hexadecimal)</td></tr>
<tr><td colspan="3">00: MP tray
01: Cassette 1
02: Cassette 2 (paper feeder 1)
03: Cassette 3 (paper feeder 2)
04: Cassette 4 (paper feeder 3)
05 to 09: Reserved</td></tr>
<tr><td colspan="3">(c) Detail of paper size (Hexadecimal)</td></tr>
<tr><td>00: (Not specified)
01: Monarch
02: Business
03: International DL
04: International C5
05: Executive
06: Letter-R
86: Letter-E
07: Legal
08: A4R
88: A4E
09: B5R
89: B5E
0A: A3</td><td>0B: B4
0C: Ledger
0D: A5R
0E: A6
0F: B6
10: Commercial #9
11: Commercial #6
12: ISO B5
13: Custom size
1E: C4
1F: Postcard
20: Reply-paid postcard
21: Oficio II</td><td>22: Special 1
23: Special 2
24: A3 wide
25: Ledger wide
26: Full bleed paper (12 x 8)
27: 8K
28: 16K-R
A8: 16K-E
32: Statement-R
B2: Statement-E
33: Folio
34: Western type 2
35: Western type 4</td></tr>
<tr><td colspan="3">(d) Detail of paper type (Hexadecimal)</td></tr>
<tr><td>01: Plain
02: Transparency
03: Preprinted
04: Labels
05: Bond
06: Recycled
07: Vellum
08: Rough
09: Letterhead</td><td>0A: Color
0B: Prepunched
0C: Envelope
0D: Cardstock
0E: Coated
0F: 2nd side
10: Thick
11: High quality</td><td>15: Custom 1
16: Custom 2
17: Custom 3
18: Custom 4
19: Custom 5
1A: Custom 6
1B: Custom 7
1C: Custom 8</td></tr>
<tr><td colspan="3">(e) Detail of paper eject location (Hexadecimal)</td></tr>
<tr><td colspan="3">01: Face down (FD)</td></tr>
</table>
</td></tr>
</table>

Service items	**Description**

No.	**Items**	**Description**		
(8)	Service Call Log	#	Count.	Service Code
		Remembers 1 to 8 of occurrence of self diagnostics error. If the occurrence of the previous diagnostics error is less than 8, all of the diagnostics errors are logged.	The total page count at the time of the self diagnostics error.	Self diagnostic error code (See page 1-4-8) Example: 01.6000 01: Self diagnostic error 6000: Self diagnostic error code number
(9)	Maintenance Log	#	Count.	item
		Remembers 1 to 8 of occurrence of replacement. If the occurrence of the previous replacement of toner container is less than 8, all of the occurrences of replacement are logged.	The total page count at the time of the replacement of the toner container. * :The toner replacement log is triggered by toner empty. This record may contain such a reference as the toner container is inserted twice or a used toner container is inserted.	Code of maintenance replacing item (1 byte, 2 categories) First byte (Replacing item) 01: Toner container Second byte (Type of replacing item) 00: Black First byte (Replacing item) 02: Maintenance kit Second byte (Type of replacing item) 01: MK-3100/3102 (40 ppm model only) MK-3130/3132 (60/50/45 ppm model only)
(10)	Unknown Toner Log	#	Count.	item
		Remembers 1 to 5 of occurrence of unknown toner detection. If the occurrence of the previous unknown toner detection is less than 5, all of the unknown toner detection are logged.	The total page count at the time of the toner empty error with using an unknown toner container.	Unknown toner log code (1 byte, 2 categories) First byte 01: Toner container (Fixed) Second byte 00: Black

Service items	Description

No.	Items	Description		
(11)	Counter Log Comprised of three log counters including paper jams, self diagnostics errors, and replacement of the toner container.	(f) Paper jam	(g) Self diagnostic error	(h) Maintenance item replacing
		Indicates the log counter of paper jams depending on location. Refer to Paper Jam Log. All instances including those are not occurred are displayed.	Indicates the log counter of self diagnostics errors depending on cause. (See page 1-4-8) Example: C6000: 4 Self diagnostics error 6000 has happened four times.	Indicates the log counter depending on the maintenance item for maintenance. T: Toner container 00: Black M: Maintenance kit 01: MK-3100/3102 (40 ppm model only) MK-3130/3132 (60/50/45 ppm model only) Example: T00: 1 The toner container has been replaced once. * :The toner replacement log is triggered by toner empty. This record may contain such a reference as the toner container is inserted twice or a used toner container is inserted.

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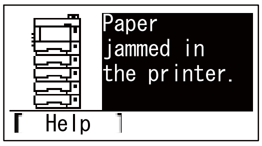
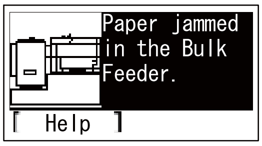
1-4-1 Paper misfeed detection

(1) Paper misfeed indication

When a paper misfeed occurs, the machine immediately stops printing and displays the paper misfeed message on the operation panel. To remove paper misfeed in the machine, pull out the cassette, open the front cover or the rear cover.



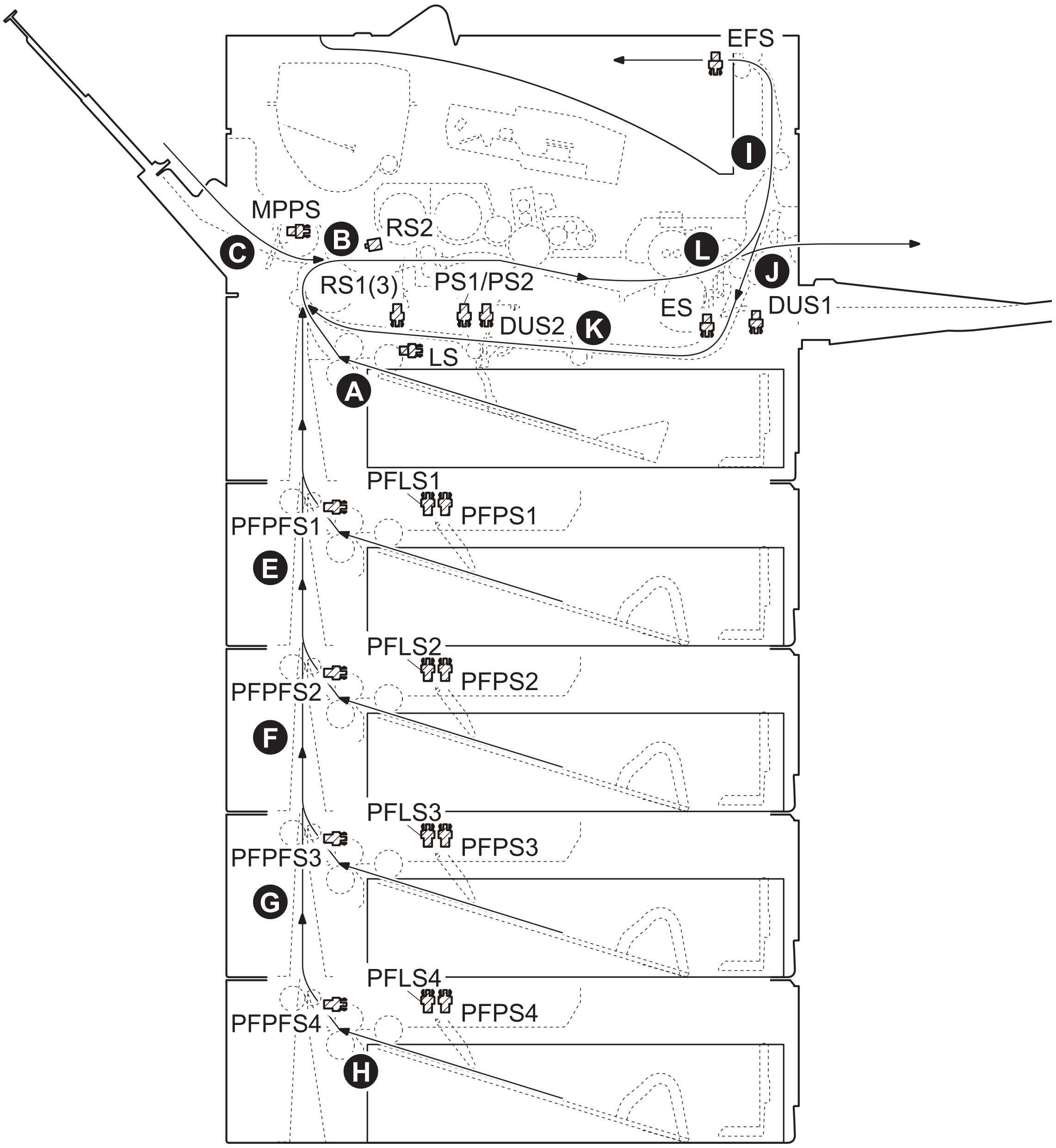
Paper jammed in the printer.



Paper jammed in the Bulk Feeder.

(2) Paper misfeed detection condition

(2-1) PF-320 (500 sheets Paper feeder)



EFS
I
MPPS
B
RS2
C
L
J
RS1(3)
PS1/PS2
ES
DUS1
DUS2
K
LS
A
PFLS1
PFPS1
PFPFS1
E
PFLS2
PFPS2
PFPFS2
F
PFLS3
PFPS3
PFPFS3
G
PFLS4
PFPS4
PFPFS4
H

Figure 1-4-1 Paper jam location

(2-2) PF-315+ (Bulk Paper Feeder)

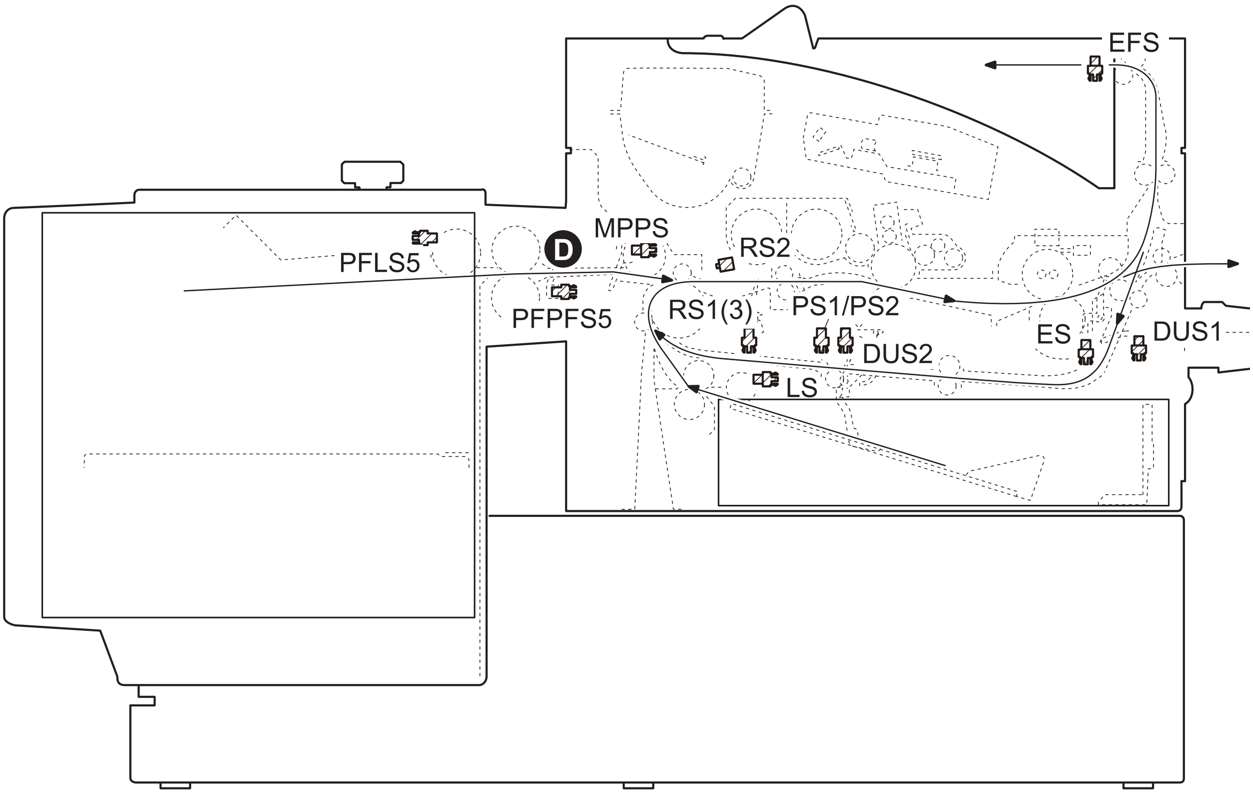

EFS
D
MPPS
RS2
PFLS5
PFPFS5
RS1(3)
PS1/PS2
ES
DUS1
DUS2
LS

Figure 1-4-2 Paper jam location

- (A)Misfeed in cassette1
- (B)Misfeed in paper feed section
- (C)Misfeed in MP tray
- (D)Misfeed in bulk paper feeder (Option)
- (E)Misfeed in cassette2 (Option)
- (F)Misfeed in cassette3 (Option)
- (G)Misfeed in cassette4 (Option)
- (H)Misfeed in cassette5 (Option)
- (I)Misfeed in exit conveying section
- (J)Misfeed in rear cover section
- (K)Misfeed in duplex conveying section
- (L)Misfeed in fuser section

Code	Contents	Conditions	Jam location*
0000	Initial jam	The power is turned on when a sensor in the conveying system is on.	-
0100	Secondary paper feed request time out	Secondary paper feed request given by the controller is unreachable.	-
0101	Waiting for process package to be ready	Process package won't be ready.	-
0104	Waiting for conveying package to be ready	Conveying package won't be ready.	-
0105	Drive intrerrupt jam	A drive does not stop.	-
0106	Paper feeding request for duplex printing time out	Paper feeding request for duplex printing given by the controller is unreachable.	-
0107	Waiting for fuser package to be ready	Fuser package won't be ready.	-
0120	Receiving a duplex paper feeding request while paper is empty	Paper feed request was received from the duplex section despite the absence of paper in the duplex section.	-
0121	Exceeding number of duplex pages circulated	The controller issued the duplex section a request for more pages than the duplex print cycle contains.	-
0501	No paper feed of jam	The registration sensor 2 (RS2) does not turn on during paper feed from cassette 1.	A
0502		PF feed sensor 1 (PFPFS1) does not turn on during paper feed from cassette 2.	E
0503		PF feed sensor 2 (PFPFS2) does not turn on during paper feed from cassette 3.	F
0504		PF feed sensor 3 (PFPFS3) does not turn on during paper feed from cassette 4.	G
0505		PF feed sensor 4 (PFPFS4) does not turn on during paper feed from cassette 5.	H
0508		The registration sensor 2 (RS2) does not turn on during paper feed from duplex section.	B
0509		The registration sensor 2 (RS2) does not turn on during paper feed from MP tray.	C

*: Refer to figure 1-4-1 for paper jam location (see page 1-4-1).

Code	Contents	Conditions	Jam location*
0511	Multiple sheets of jam	The registration sensor 2 (RS2) does not turn off during paper feed from cassette 1.	B
0512		PF feed sensor 1 (PFPFS1) does not turn off during paper feed from cassette 2.	B
0513		PF feed sensor 2 (PFPFS2) does not turn off during paper feed from cassette 3.	B
0514		PF feed sensor 3 (PFPFS3) does not turn off during paper feed from cassette 4.	B
0515		PF feed sensor 4 (PFPFS4) does not turn off during paper feed from cassette 5.	B
0518		The registration sensor 2 (RS2) does not turn off during paper feed from duplex section.	B
0519		The registration sensor 2 (RS2) does not turn off during paper feed from MP tray.	B
0529	No paper feed of jam (Bulk feeder)	The registration sensor 2 (RS2) does not turn on during paper feed from bulk feeder.	D
0539	Multiple sheets of jam (Bulk feeder)	The registration sensor 2 (RS2) does not turn off during paper feed from bulk feeder.	B
1403	PF feed sensor 1 non arrival jam	PF feed sensor 1 (PFPFS1) does not turn on during paper feed from cassette 3.	E
1404		PF feed sensor 1 (PFPFS1) does not turn on during paper feed from cassette 4.	E
1405		PF feed sensor 1 (PFPFS1) does not turn on during paper feed from cassette 5.	E
1413	PF feed sensor 1 stay jam	PF feed sensor 1 (PFPFS1) does not turn off during paper feed from cassette 3.	E
1414		PF feed sensor 1 (PFPFS1) does not turn off during paper feed from cassette 4.	E
1415		PF feed sensor 1 (PFPFS1) does not turn off during paper feed from cassette 5.	E
1604	PF feed sensor 2 non arrival jam	PF feed sensor 2 (PFPFS2) does not turn on during paper feed from cassette 4.	F
1605		PF feed sensor 2 (PFPFS2) does not turn on during paper feed from cassette 5.	F
1614	PF feed sensor 2 stay jam	PF feed sensor 2 (PFPFS2) does not turn off during paper feed from cassette 4.	F
1615		PF feed sensor 2 (PFPFS2) does not turn off during paper feed from cassette 5.	F
1805	PF feed sensor 3 non arrival jam	PF feed sensor 3 (PFPFS3) does not turn on during paper feed from cassette 5.	G
1815	PF feed sensor 3 stay jam	PF feed sensor 3 (PFPFS3) does not turn off during paper feed from cassette 5.	G

*: Refer to figure 1-4-1 for paper jam location (see page 1-4-1).

Code	Contents	Conditions	Jam location*
4002	Registration sensor 2 non arrival jam	The registration sensor 2 (RS2) does not turn on during paper feed from cassette 2.	B
4003		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 3.	B
4004		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 4.	B
4005		The registration sensor 2 (RS2) does not turn on during paper feed from cassette 5.	B
4012	Registration sensor 2 stay jam	The registration sensor 2 (RS2) does not turn off during paper feed from cassette 2.	B
4013		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 3.	B
4014		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 4.	B
4015		The registration sensor 2 (RS2) does not turn off during paper feed from cassette 5.	B
4101	Registration sensor 3 non arrival jam	The registration sensor 3 (RS3) does not turn on during paper feed from cassette 1.	B
4102		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 2.	B
4103		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 3.	B
4104		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 4.	B
4105		The registration sensor 3 (RS3) does not turn on during paper feed from cassette 5.	B
4108		The registration sensor 3 (RS3) does not turn on during paper feed from duplex section.	B
4109		The registration sensor 3 (RS3) does not turn on during paper feed from MP tray.	B

*: Refer to figure 1-4-1 for paper jam location (see page 1-4-1).

Code	Contents	Conditions	Jam location*
4111	Registration sensor 3 stay jam	The registration sensor 3 (RS3) does not turn off during paper feed from cassette 1.	B
4112		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 2.	B
4113		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 3.	B
4114		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 4.	B
4115		The registration sensor 3 (RS3) does not turn off during paper feed from cassette 5.	B
4118		The registration sensor 3 (RS3) does not turn off during paper feed from duplex section.	B
4119		The registration sensor 3 (RS3) does not turn off during paper feed from MP tray.	B
4201	Ejetct sensor non arrival jam	The eject sensor (ES) does not turn on during paper feed from cassette 1.	I
4202		The eject sensor (ES) does not turn on during paper feed from cassette 2.	I
4203		The eject sensor (ES) does not turn on during paper feed from cassette 3.	I
4204		The eject sensor (ES) does not turn on during paper feed from cassette 4.	I
4205		The eject sensor (ES) does not turn on during paper feed from cassette 5.	I
4208		The eject sensor (ES) does not turn on during paper feed from duplex section.	I
4209		The eject sensor (ES) does not turn on during paper feed from MP tray.	I

*: Refer to figure 1-4-1 for paper jam location (see page 1-4-1).

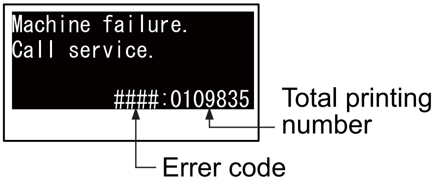
Code	Contents	Conditions	Jam location*
4211	Ejetct sensor stay jam	The eject sensor (ES) does not turn off during paper feed from cassette 1.	I or L
4212		The eject sensor (ES) does not turn off during paper feed from cassette 2.	I or L
4213		The eject sensor (ES) does not turn off during paper feed from cassette 3.	I or L
4214		The eject sensor (ES) does not turn off during paper feed from cassette 4.	I or L
4215		The eject sensor (ES) does not turn off during paper feed from cassette 5.	I or L
4218		The eject sensor (ES) does not turn off during paper feed from duplex section.	I or L
4219		The eject sensor (ES) does not turn off during paper feed from MP tray.	I or L
4301	Duplex sensor 1 non arrival jam	The duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 1.	J
4302		The duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 2.	J
4303		The duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 3.	J
4304		The duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 4.	J
4305		The duplex sensor 1 (DUS1) does not turn on during paper feed from cassette 5.	J
4309		The duplex sensor 1 (DUS1) does not turn on during paper feed from MP tray or bulk feeder.	J
4401	Duplex sensor 2 non arrival jam	The duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 1.	K
4402		The duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 2.	K
4403		The duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 3.	K
4404		The duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 4.	K
4405		The duplex sensor 2 (DUS2) does not turn on during paper feed from cassette 5.	K
4409		The duplex sensor 2 (DUS2) does not turn on during paper feed from MP tray or bulk feeder.	K
4418	Duplex sensor 2 stay jam	The duplex sensor 2 (DUS2) does not turn off during paper feed from duplex section.	K

*: Refer to figure 1-4-1 for paper jam location (see page 1-4-1).

1-4-2 Self-diagnostic function

(1) Self-diagnostic function

This machine is equipped with self-diagnostic function. When a problem is detected, the machine stops printing and display an error message on the operation panel. An error message consists of a message prompting a contact to service personnel and a four-digit error code indicating the type of the error.



Machine failure.
Call service.
####:0109835

(2) Self diagnostic codes

If the part causing the problem was not supplied, use the unit including the part for replacement.

Code	Contents	Causes	Check procedures/ corrective measures
0100	**Backup memory device error**	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	
0120	**MAC address data error** For data in which the MAC address is invalid.	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-22).
0130	**Backup memory read/write error (main PWB)**	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	
0140	**Backup memory data error (main PWB)**	Defective flash memory.	Replace the main PWB and check for correct operation (see page 1-5-22).
		Defective main PWB.	
0150	**Backup memory read/write error (engine PWB)** Detecting engine PWB EEPROM communication error.	Improper installation engine PWB EEPROM.	Check the installation of the EEPROM and remedy if necessary.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
		Device damage of EEPROM.	Contact the Service Administrative Division.
0160	**Backup memory data error (engine PWB)**	Defective EEPROM.	Replace the engine PWB and check for correct operation (see page 1-5-22).
		Defective engine PWB.	

Code	Contents	Causes	Check procedures/ corrective measures
0170	**Billing counting error** A checksum error is detected in the main and engine backup memories for the billing counters.	Data damage of EEPROM.	Contact the Service Administrative Division.
		Defective PWB.	Replace the main PWB or the engine PWB and check for correct operation (see page 1-5-22, 1-5-22).
0190	**Backup memory device error (engine PWB)**	Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
0800	**Image processing error** JAM010x is detected twice.	Defective main PWB.	Replace the main PWB and check for correct operations page 1-5-22).
0840	**Faults of RTC** The time is judged to go back based on the comparison of the RTC time and the current time or five years or more have passed.	The battery is disconnected from the main PWB.	Check visually and remedy if necessary
		Defective main PWB.	Replace the main PWB and check for correct operation (see page 1-5-22).
1010	**Lift motor error (60/50/45 ppm model only)** After cassette 1 is inserted, lift sensor does not turn on within 10 s. This error is detected four times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Lift motor and engine PWB (YC13)
		Defective drive transmission system of the lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective lift motor.	Replace the lift motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
1020	**PF lift motor 1 error (paper feeder)** After cassette 2 is inserted, PF lift sensor 1 does not turn on. This error is detected four times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor 1 and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor 1.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1030	**PF lift motor 2 error (paper feeder)** After cassette 3 is inserted, PF lift sensor 2 does not turn on. This error is detected four times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor 2 and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor 2.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1040	**PF lift motor 3 error (paper feeder)** After cassette 4 is inserted, PF lift sensor 3 does not turn on. This error is detected four times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor 3 and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor 3.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1050	**PF lift motor 4 error (paper feeder)** After cassette 5 is inserted, PF lift sensor 4 does not turn on. This error is detected four times successively.	Defective bottom plate elevation mechanism in the cassette.	Check to see if the bottom plate can move smoothly and repair it if any problem is found.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF lift motor 4 and PF main PWB (YC7)
		Defective drive transmission system of the PF lift motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF lift motor.	Replace the PF lift motor 4.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1140	**BPF lift motor upward error (Bulk paper feeder)** BPF lift maximum sensor does not turn on. The lock signal of the motor is detected continuously three times.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. BPF lift motor and BPF main PWB
		Defective drive transmission system of the motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective BPF lift motor.	Replace the BPF lift motor.
		Defective BPF main PWB.	Replace the BPF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1150	**BPF lift motor downward error (Bulk paper feeder)** BPF lift minimum sensor does not turn on. The lock signal of the motor is detected continuously three times.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. BPF lift motor and BPF main PWB
		Defective drive transmission system of the motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective BPF lift motor.	Replace the BPF lift motor.
		Defective BPF main PWB.	Replace the BPF main PWB (Refer to the service manual for the paper feeder).
1800	**Paper feeder 1 communication error** A communication error is detected 10 times in succession.	Improper installation paper feeder.	Follow installation instruction carefully again.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and engine PWB (YC22)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1810	**Paper feeder 2 communication error** A communication error is detected 10 times in succession.	Improper installation paper feeder.	Follow installation instruction carefully again.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1820	**Paper feeder 3 communication error** A communication error is detected 10 times in succession.	Improper installation paper feeder.	Follow installation instruction carefully again.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
1830	**Paper feeder 4 communication error** A communication error is detected 10 times in succession.	Improper installation paper feeder.	Follow installation instruction carefully again.
		Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF main PWB (YC3) and PF main PWB (YC4)
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
1900	**Paper feeder 1/BPF paper feeder EEPROM error** When writing the data, the write data and the read data is not in agreement.	Defective PF main PWB.	Replace the PF main PWB or the BPF main PWB (Refer to the service manual for the paper feeder).
		Device damage of EEPROM.	
1910	**Paper feeder 2 EEPROM error** When writing the data, the write data and the read data is not in agreement.	Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
		Device damage of EEPROM.	
1920	**Paper feeder 3 EEPROM error** When writing the data, the write data and the read data is not in agreement.	Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
		Device damage of EEPROM.	
1930	**Paper feeder 4 EEPROM error** When writing the data, the write data and the read data is not in agreement.	Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
		Device damage of EEPROM.	
2000	**Main motor drive error** The main motor is not stabilized within 2 s after driving starts.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Main motor and engine PWB (YC4)
		Defective drive transmission system of the main motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective main motor.	Replace the main motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

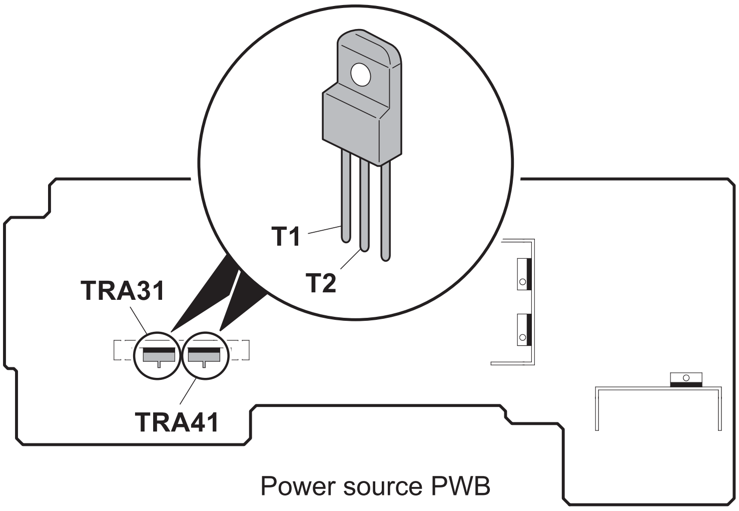
Code	Contents	Causes	Check procedures/ corrective measures
2010	**Main motor steady-state error** Stable OFF is detected for 2 s continuously after main motor stabilized.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Main motor and engine PWB (YC4)
		Defective drive transmission system of the main motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective main motor.	Replace the main motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
2200	**Drum motor drive error (60/50/45 ppm model only)** The drum motor is not stabilized within 2 s after driving starts.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum motor and engine PWB (YC4)
		Defective drive transmission system of the drum motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective drum motor.	Replace the drum motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
2210	**Drum motor steady-state error** **(60/50/45 ppm model only)** Stable OFF is detected for 2 s continuously after drum motor stabilized.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum motor and engine PWB (YC4)
		Defective drive transmission system of the drum motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective drum motor.	Replace the drum motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
2330	**Fuser pressure release motor error (Over-current) (60/50/45 ppm model only)** The over-current detection signal of the motor is detected continuously twenty times.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser pressure release motor and relay-L PWB(YC11) Relay-L PWB and engine PWB(YC2)
		Defective drive transmission system of the fuser pressure release motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective fuser pressure release motor.	Replace the fuser pressure release motor.
		Defective PWB.	Replace the relay-L PWB or engine PWB. (See Page 1-5-24,1-5-22)
2340	**Fuser pressure release motor error (Timeout) (60/50/45 ppm model only)** The position detection sensor is not detected continuously for 30 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser pressure release motor and relay-L PWB(YC11) Relay-L PWB and engine PWB(YC2)
		Defective drive transmission system of the fuser pressure release motor.	Check if the gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective fuser pressure release motor.	Replace the fuser pressure release motor.
		Defective PWB.	Replace the relay-L PWB or engine PWB. (See Page 1-5-24,1-5-22)
2600	**PF drive motor 1 error (paper feeder 1)** When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF drive motor 1 and PF main PWB (YC6)
		Defective drive transmission system of the PF drive motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF drive motor.	Replace the PF drive motor 1.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).

Code	Contents	Causes	Check procedures/ corrective measures
2610	**PF drive motor 2 error (paper feeder 2)** When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF drive motor 2 and PF main PWB (YC6)
		Defective drive transmission system of the PF drive motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF drive motor.	Replace the PF drive motor 2.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2620	**PF drive motor 3 error (paper feeder 3)** When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF drive motor 3 and PF main PWB (YC6)
		Defective drive transmission system of the PF drive motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF drive motor.	Replace the PF drive motor 3.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
2630	**PF drive motor 4 error (paper feeder 4)** When the PF drive motor is driven, error signal is detected continuously for 2 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PF drive motor 4 and PF main PWB (YC6)
		Defective drive transmission system of the PF drive motor.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
		Defective PF drive motor.	Replace the PF drive motor 4.
		Defective PF main PWB.	Replace the PF main PWB (Refer to the service manual for the paper feeder).
4000	**Polygon motor synchronization error** The polygon motor is not stabilized within 20 s after driving starts.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Polygon motor and engine PWB (YC15)
		Defective polygon motor.	Replace the laser scanner unit (see page 1-5-18).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
4200	**BD steady-state error** When the value of Register BDSET is 1 after setting Register BDSET as one and passing by BD1 cycle.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. PD PWB and engine PWB (YC16)
		Defective PD PWB.	Replace the laser scanner unit (see page 1-5-18).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
5100	**Chager current error** When the current value measured at the time of potential adjustment is less than 20 μA. When the current values in the chager voltage 500V constitute not less than 85% of target current values.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Chager unit and high voltage PWB High voltage PWB and engine PWB (YC16)
		Defective high voltage PWB.	Replace the high voltage PWB and check for correct operation (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
6000	**Broken fuser heater wire** (60/50/45 ppm model) The detection temperature of fuser thermistor 2 is 100 °C/ 212°F or less after the fuser heater lamp has been turned on continuously for 30 s. (40 ppm model) The detection temperature of fuser thermistor 1 is 100 °C/ 212°F or less after the fuser heater lamp has been turned on continuously for 30 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser heater and power source PWB (YC2) Fuser thermistor and Fuser thermistor connect PWB Fuser thermistor connect PWB and engine PWB (YC21)
		Deformed connector pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Fuser thermostat triggered.	Reinsert the fuser unit (see page 1-5-19).
		Broken fuser heater wire.	
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6020	**Abnormally high fuser thermistor 2 temperature (60/50/45 ppm model only)** The detection temperature of fuser thermistor 2 is higher than 235°C/455°F. In a heater-off state, the detection temperature of fuser thermistor 2 is higher than 195°C/383°F after the detection temperature of fuser thermistor 2 was 155°C/311°F or less.	Deformed connector pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Shorted fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
6030	**Broken fuser thermistor 2 wire (60/50/45 ppm model only)** A/D value of the fuser thermistor 2 exceeds 1019 bit continuously for 4 s during warming up.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser thermistor and fuser thermistor connect PWB Fuser thermistor connect PWB and engine PWB (YC21)
		Deformed connector pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Defective fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6000/ **6020/** **6030/** **6120/** **6130/** **Com-bined**	**Broken fuser heater wire** **Abnormally high fuser thermistor 2 temperature** **Broken fuser thermistor 2 wire** **Abnormally high fuser thermistor 1 temperature** **Broken fuser thermistor 1 wire**	Deformed connector pin.	If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign matters, replace the connectors or the units including the connectors.
		Defective triac.	Remove the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 (the triac TRA41 is 60/50/45 ppm model only) are of several Mega-Ohms and not shorted (see figure 1-4-3). If failed, replace the power source PWB (see page 1-5-25).
		 **Figure 1-4-3**	

Code	Contents	Causes	Check procedures/ corrective measures
6120	**Abnormally high fuser thermistor 1 temperature** (60/50/45 ppm model) The detection temperature of fuser thermistor 1 is higher than 245°C/473°F. In a heater-off state, the detection temperature of fuser thermistor 1 is higher than 195°C/383°F after the detection temperature of fuser thermistor 1 was 155°C/311°F or less. (40 ppm model) The detection temperature of fuser thermistor 1 is higher than 250°C/482°F. In a heater-off state, the detection temperature of fuser thermistor 1 is higher than 170°C/338°F after the detection temperature of fuser thermistor 1 was 155°C/311°F or less.	Deformed connector pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Shorted fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
6130	**Broken fuser thermistor 1 wire** A/D value of the fuser thermistor 1 exceeds 1019 bit continuously for 4 s during warming up.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Fuser thermistor and fuser thermistor connect PWB Fuser thermistor connect PWB and engine PWB (YC21)
		Deformed connector pin.	See page 1-4-19.
		Defective triac.	See page 1-4-19.
		Defective fuser thermistor.	Replace the fuser unit (see page 1-5-19).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
6400	**Zero-cross signal error** While fuser heater control is performed, the zero-cross signal is not input within 2 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Power source PWB (YC3) and engine PWB (YC1)
		Defective power source PWB or engine PWB.	Replace the power source PWB or the engine PWB and check for correct operation (see page 1-5-22).
7000	**Toner motor error** During driving the toner motor, an over-current detection signal is detected at intervals of 10 ms as for 300 accumulation.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner motor and drum PWB (YC4) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner motor.	Replace the toner motor.
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
7100	**Toner sensor error** Sensor output value of 930 or more continuously for 5 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Toner sensor and drum PWB (YC3) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner sensor.	Replace the developer unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
7400	**Developer unit non-installing error** Sensor output value of 31 or less continuously for 5 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer unit and drum PWB (YC3) Drum PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner sensor.	Replace the developer unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Code	Contents	Causes	Check procedures/ corrective measures
7410	**Drum unit type mismatch error** The drum PWB EEPROM does not communicate normally. Absence of the drum unit is detected.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit and drum connect PWB (YC1) Drum connect PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC2)
		Defective toner sensor.	Replace the drum unit. (See Page 1-5-13)
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
7800	**Broken external thermistor wire** The average of thermistor output value of 1016 or more continuously for 160 ms. The average of thermistor output value of 930 or more continuously for 5 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
		Defective temperature sensor.	Replace the operation PWB.
7810	**Short-circuited external thermistor wire** The average of thermistor output value of 31 or less continuously for 5 s.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
		Defective temperature sensor.	Replace the operation PWB.
7900	**Drum unit EEPROM error** No response is issued from the device in reading/writing for 5 ms or more and this problem is repeated five times successively. Mismatch of reading data from two locations occurs eight times successively. Mismatch between writing data and reading data occurs eight times successively.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Drum unit and drum connect PWB (YC1) Drum connect PWB and relay-L PWB (YC3) Relay-L PWB and engine PWB (YC15)
		Defective drum unit.	Replace the drum unit (see 1-5-15).

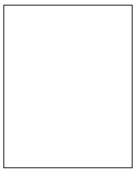
Code	Contents	Causes	Check procedures/ corrective measures
F000	**Main PWB - operation PWB communication error**	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Operation PWB and engine PWB (YC17)
		Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-22).
		Defective operation PWB.	Replace the operation PWB and check for correct operation.
F010	**Main PWB checksum error**	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-22).
F020	**Main PWB RAM checksum error**	Defective main memory (RAM) in main PWB	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-22).
		Defective expended memory (DIMM)	Replace the expansion memory (DIMM). (See Page 1-2-12) Also in the case of the capacity besides specification, it displays.
F040	**Main PWB - print engine communication error**	Defective main PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace main PWB (see page 1-5-22).
		Defective engine PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
F050	**Print engine ROM checksum error**	Defective engine PWB.	Turn the main power switch off/on to restart the machine. If the error is not resolved, replace engine PWB (see page 1-5-22).

NOTE:
The other F codes are indicated to the appendix (see page 2-4-12).

1-4-3 Image formation problems

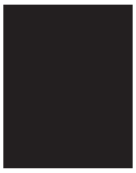
If the part causing the problem was not supplied, use the unit including the part for replacement.

(1) No image appears (entirely white).



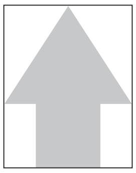
See page 1-4-25

(2) No image appears (entirely black).



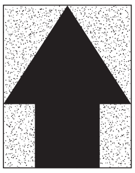
See page 1-4-25

(3) Image is too light.



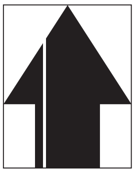
See page 1-4-26

(4) The background is colored.



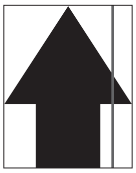
See page 1-4-27

(5) White streaks are printed vertically.



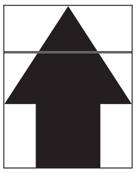
See page 1-4-27

(6) Black streaks are printed vertically.



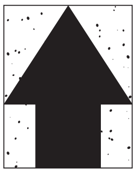
See page 1-4-28

(7) Streaks are printed horizontally.



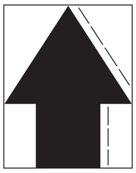
See page 1-4-28

(8) Spots are printed.



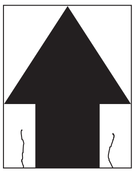
See page 1-4-28

(9) Image is blurred.



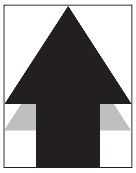
See page 1-4-29

(10) Paper is wrinkled.



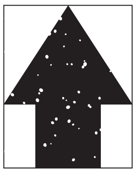
See page 1-4-29

(11) Offset occurs.



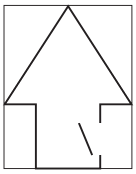
See page 1-4-29

(12) Part of image is missing.



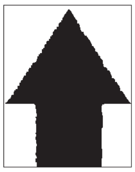
See page 1-4-29

(13) Fusing is loose.



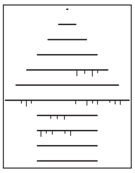
See page 1-4-30

(14) Image is out of focus.



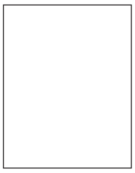
See page 1-4-30

(15) Carrier leaking occurs.



See page 1-4-30

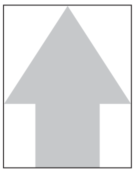
(1) No image appears (entirely white).

Print example	Causes		Check procedures/corrective measures
	Defective developer bias output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	No LSU laser is output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Laser scanner unit and engine PWB (YC16)
		The shutter of a laser scanner unit does not open.	The operating state of a link part with an top cover is checked.
		Defective laser scanner unit.	Replace the laser scanner unit (see page 1-5-18).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
		Defective main PWB.	Replace the main PWB (see page 1-5-22).

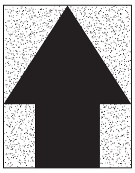
(2) No image appears (entirely black).

Print example	Causes		Check procedures/corrective measures
	No main charging.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Chager roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective poor connection of the charger roller	Connection is checked by the electrical connection inspection of the charger roller.
		Defective charger roller unit.	Replace the charger roller unit (see page 1-5-15).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).

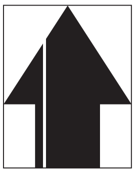
(3) Image is too light.

Print example	Causes		Check procedures/corrective measures
	Dew condensation of the drum surface.		Perform the drum surface refreshing in a system menu.
	The paper is moist.		The storage state of a paper is checked.
	Defective transfer charger output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Transfer roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Defective developer bias output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC10)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Insufficient toner.		If the display shows the message requesting toner replenishment, replace the container.

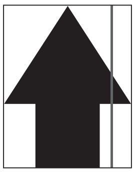
(4) The background is colored.

Print example	Causes		Check procedures/corrective measures
	Defective main charger output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Chager roller unit and high voltage PWB High voltage PWB and engine PWB (YC19)
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Defective developer bias output.	Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer unit and high voltage PWB High voltage PWB and engine PWB (YC10)
		Defective developer unit.	Replace the developer unit (see page 1-5-13).
		Defective high voltage PWB.	Replace the high voltage PWB (see page 1-5-26).
		Defective engine PWB.	Replace the engine PWB (see page 1-5-22).
	Deteriorated toner.		Perform the drum surface refreshing operation.

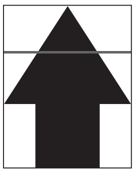
(5) White streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Foreign matter in the developer unit.	Check if the magnetic brush is formed uniformly. Replace the developer unit if any foreign matter (see page 1-5-13).
	Adhesion of soiling to transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-16).
	Dust adhesion to the charger roller unit.	Clean the chager roller unit.
	Dirty dust shield glass of laser scanner unit.	Clean the dust shield glass of laser scanner unit.

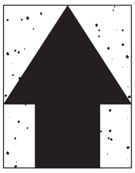
(6) Black streaks are printed vertically.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
	Defective transfer roller.	Replace the transfer roller unit (see page 1-5-16).
	Defective chager roller.	Replace the chager roller unit (see page 1-5-15).
	Defective developer roller.	Replace the developer unit (see page 1-5-13).

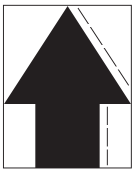
(7) Streaks are printed horizontally.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Dirty developer section.	Clean any part contaminated with toner in the developer section.
	Poor contact of grounding terminal of drum unit.	Check the installation of the drum unit. If it operates incorrectly, replace it (see page 1-5-15).
	The beam detection error of a laser scanner unit	Replace the laser scanner unit (see page 1-5-18).

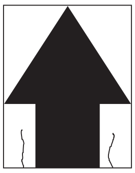
(8) Spots are printed.

Print example	Causes	Check procedures/corrective measures
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
	Flawed developer roller.	Replace the developer unit (see page 1-5-13).
	Dirty heat roller and press roller.	Clean the heat roller and press roller.

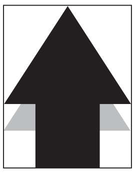
(9) Image is blurred.

Print example	Causes	Check procedures/corrective measures
	Deformed press roller.	Replace the fuser unit (see page 1-5-19).
	Paper conveying section drive problem.	Check the gears and belts and, if necessary, grease them.

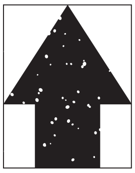
(10) Paper is wrinkled.

Print example	Causes	Check procedures/corrective measures
	Paper curled.	Check the paper storage conditions.
	Paper damp.	
	Defective pressure springs.	Replace the fuser unit (see page 1-5-19).

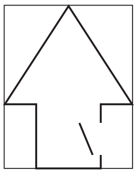
(11) Offset occurs.

Print example	Causes	Check procedures/corrective measures
	Deformed or worn cleaning blade in the drum unit.	Replace the drum unit (see page 1-5-15).
	Defective fuser unit.	Replace the fuser unit (see page 1-5-19).
	Wrong types of paper.	Check if the paper meets specifications. Replace paper.

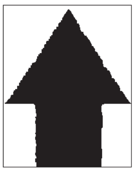
(12) Part of image is missing.

Print example	Causes	Check procedures/corrective measures
	Paper damp.	Check the paper storage conditions.
	Paper creased.	Replace the paper.
	Drum condensation.	Perform the drum surface refreshing operation.
	Dirty or flawed drum.	Perform the drum surface refreshing operation. Flawed drum. Replace the drum unit (see page 1-5-15).
	Dirty transfer roller.	Clean the transfer roller. Replace the transfer roller if it is extremely dirty (see page 1-5-16).

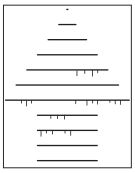
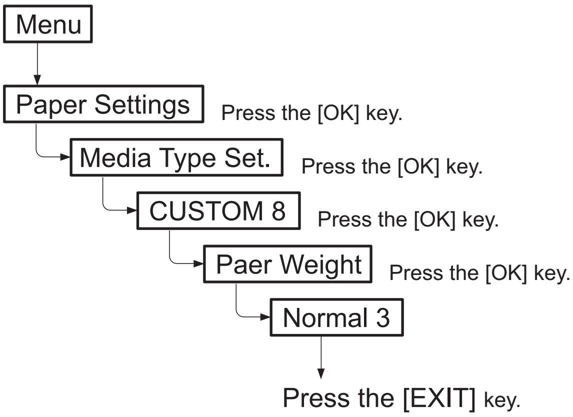
(13) Fusing is loose.

Print example	Causes	Check procedures/corrective measures
	Wrong types of paper.	Check if the paper meets specifications, replace paper. Setup of media Practical use of half speed printing
	Paper creased.	Replace the paper.
	Flawed heat roller or press roller.	Replace the fuser unit (see page 1-5-19).
	Defective pressure springs.	
	Defective fuser heater.	

(14) Image is out of focus.

Print example	Causes	Check procedures/corrective measures
	Drum condensation.	Perform the drum refresh operation.

(15) Carrier leaking occurs.

Print example	Causes	Check procedures/corrective measures
	Paper creased.	Replace the paper.
		Each of following paper kinds are changed and printed. A paper setup of a printer is changed.  Menu Paper Settings Press the [OK] key. Media Type Set. Press the [OK] key. CUSTOM 8 Press the [OK] key. Paer Weight Press the [OK] key. Normal 3 Press the [EXIT] key. A setup of a driver is changed. By basic setup, the kind of paper is made "CUSTOM 8".

1-4-4 Electric problems

If the part causing the problem was not supplied, use the unit including the part for replacement.
Troubleshooting to each failure must be in the order of the numbered symptoms.

Problem	Causes	Check procedures/corrective measures
(1) The machine does not operate when the power switch is turned on.	1. No electricity at the power outlet.	Measure the input voltage.
	2. The power cord is not plugged in properly.	Check the contact between the power plug and the outlet.
	3. Broken power cord.	Check for continuity. If none, replace the cord.
	4. Defective power switch.	Check for continuity across the contacts. If none, replace the power switch.
	5. Defective interlock switch.	Check for continuity across the contacts of interlock switch. If none, replace the power source PWB (see page 1-5-25).
	6. Defective power source PWB.	Replace the power source PWB or engine PWB (see page 1-5-25,1-5-22).
(2) Eject motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Eject motor and relay-L PWB (YC12) Relay-L PWB and engine PWB (YC2/YC3)
	2. Defective drive transmission system.	Check if the rollers and gears rotate smoothly. If not, grease the bushes and gears. Check for broken gears and replace if any.
	3. Defective motor.	Replace the eject motor.
	4. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).
(3) Power source fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Power source fan motor and engine PWB (YC10)
	2. Defective motor.	Replace the power source fan motor.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(4) LSU fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. LSU fan motor and relay-L PWB (YC4) Relay-L PWB and engine PWB (YC2/YC3)
	2. Defective motor.	Replace the LSU fan motor.
	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).

Problem	Causes	Check procedures/corrective measures
(5) Developer fan motor does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer fan motor and fuser thermistor connect PWB (YC4) Fuser thermistor connect PWB and engine PWB (YC21)
	2. Defective motor.	Replace the developer fan motor.
	3. Defective PWB.	Replace the engine PWB or fuser thermistor connect PWB and check for correct operation (see page 1-5-22).
(6) Paper feed clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Paper feed clutch and engine PWB (YC5)
	2. Defective clutch.	Replace the paper feed clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(7) Registration clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Registration clutch and engine PWB (YC5)
	2. Defective clutch.	Replace the registration clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(8) Duplex clutch does not operate. (60/50/45 ppm model only)	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Duplex clutch and engine PWB (YC5)
	2. Defective clutch.	Replace the duplex clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(9) Developer clutch does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Developer clutch and engine PWB (YC5)
	2. Defective clutch.	Replace the developer clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(10) Conveying clutch does not operate. (60/50/45 ppm model only)	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Conveying clutch and engine PWB (YC5)
	2. Defective clutch.	Replace the Conveying clutch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(11) MP solenoid does not operate.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP solenoid and engine PWB (YC8)
	2. Defective solenoid.	Replace the MP solenoid.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Problem	Causes	Check procedures/corrective measures
(12) Feedshift solenoid does not operate. (60/50/45 ppm model only)	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Feedshift solenoid and relay-L PWB (YC13) Relay-L PWB and engine PWB (YC2/YC3)
	2. Defective solenoid.	Replace the Feedshift solenoid.
	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).
(13) The message requesting paper to be loaded is shown when paper is present on the cassette.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. High voltage PWB and engine PWB (YC19)
	2. Deformed actuator of the paper sensor.	Check visually and replace if necessary.
	3. Defective paper sensor.	Replace the engine PWB or the high voltage PWB and check for correct operation (see page 1-5-22,1-5-26).
	4. Defective PWB.	
(14) The message requesting paper to be loaded is shown when paper is present on the MP tray.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. MP paper sensor and relay-L PWB (YC8) Relay-L PWB and engine PWB (YC2)
	2. Deformed actuator of the MP paper sensor.	Check visually and replace if necessary.
	3. Defective MP paper sensor.	Replace the MP paper sensor.
	4. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).
(15) The size of paper on the cassette is not displayed correctly.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Cassette size switch and engine PWB (YC7)
	2. Defective cassette size switch.	Replace the cassette size switch.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).

Problem	Causes	Check procedures/corrective measures
(16) A paper jam in the paper feed, paper conveying or eject section is indicated when the main power switch is turned on.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Regist sensor 2 and Drum PWB (YC6) DU sensor 1 and Relay-L PWB (YC9) PF feed sensor and PF main PWB Eject full sensor and engine PWB (YC12) Eject sensor and Engine PWB (YC26)
	2. A piece of paper torn from paper is caught around registration sensor, duplex sensor, PF feed sensor, eject full sensor or eject sensor.	Check visually and remove it, if any.
	3. Defective sensor.	Replace the registration sensor, duplex sensor, PF feed sensor, eject full sensor or eject sensor.
	4. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(17) A message indicating cover open is displayed when the top cover is closed.	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Interlock switch and engine PWB (YC6)
	2. Defective interlock switch.	Check and replace if necessary.
	3. Defective PWB.	Replace the engine PWB and check for correct operation (see page 1-5-22).
(18) A message indicating cover open is displayed when the rear cover is closed. (60/50/45 ppm model only)	1. Defective connector cable or poor contact in the connector.	Reinsert the connector. Also check for continuity within the connector cable. If none, replace the cable. Rear cover switch and relay-L PWB (YC10) Relay-L PWB and engine PWB (YC2/3)
	2. Defective rear cover switch.	Check and replace if necessary.
	3. Defective PWB.	Replace the engine PWB or the relay-L PWB and check for correct operation (see page 1-5-22, 1-5-24).

1-4-5 Mechanical problems

If the part causing the problem was not supplied, use the unit including the part for replacement.

Problem	Causes/check procedures	Corrective measures
(1) No primary paper feed.	Check if the surfaces of the following rollers are dirty with paper powder. Pickup roller Paper feed roller MP paper feed pulley	Clean with isopropyl alcohol.
	Check if the following rollers is deformed. Pickup roller Paper feed roller MP paper feed pulley	Check visually and replace any deformed (see page 1-5-8, 1-5-10).
	Defective paper feed clutch installation.	Check visually and remedy if necessary.
(2) No secondary paper feed.	Check if the surfaces of the following rollers are dirty with paper powder. Upper registration roller Lower registration roller	Clean with isopropyl alcohol.
	Defective registration clutch installation.	Check visually and remedy if necessary.
(3) Skewed paper feed.	Paper width guide in a cassette installed incorrectly.	Check the paper width guide visually and remedy or replace if necessary.
(4) Multiple sheets of paper are fed.	Check if the paper is excessively curled.	Change the paper.
	Paper is loaded incorrectly.	Load the paper correctly.
	Check if the retard roller is worn.	Replace the retard roller if it is worn (see page 1-5-8).
(5) Paper jams.	Check if the paper is excessively curled.	Change the paper.
	Check if the contact between the upper and lower registration rollers is correct.	Check visually and remedy if necessary.
	Check if the heat roller or press roller is extremely dirty or deformed.	Check visually and replace the fuser unit (see page 1-5-19).
(6) Toner drops on the paper conveying path.	Check if the drum unit or developer unit is extremely dirty.	Clean the drum unit or developer unit.
(7) Abnormal noise is heard.	Check if the rollers, pulleys and gears operate smoothly.	Grease the bushes and gears.
	Check if the following clutches are installed correctly. Paper feed clutch Registration clutch Duplex clutch	Check visually and remedy if necessary.

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1-5-1 Precautions for assembly and disassembly

(1) Precautions

Before starting disassembly, push the power switch and check the disappeared display of an operation panel certainly. Unplug the power cable from the wall outlet.
When handling PWBs (printed wiring boards), do not touch parts with bare hands.
The PWBs are susceptible to static charge.
Do not touch any PWB containing ICs with bare hands or any object prone to static charge.
When removing the hook of the connector, be sure to release the hook.
Take care not to get the cables caught.
To reassemble the parts, use the original screws. If the types and the sizes of screws are not known, refer to the PARTS LIST.

(2) Drum unit

Note the following when handling or storing the drum unit.
When removing the drum unit, never expose the drum surface to strong direct light.
Keep the drum unit at an ambient temperature between -20°C/-4°F and 40°C/104°F and at a relative humidity not higher than 85% RH. Avoid abrupt changes in temperature and humidity.
Avoid exposure to any substance which is harmful to or may affect the quality of the drum unit.
Do not touch the drum surface with any object. Should it be touched by hands or stained with oil, clean it.

(3) Toner

Store the toner containers in a cool, dark place.
Avoid exposing the toner containers to direct light and high humidity.

1-5-2 Outer covers

(1) Detaching and refitting the top cover

Procedure

1. Open the rear cover.
2. Open the top cover.
3. Remove two screws.
4. Release two hooks and then lift the top cover upward.
5. Pull out FFC from the connector and then remove the top cover assembly.

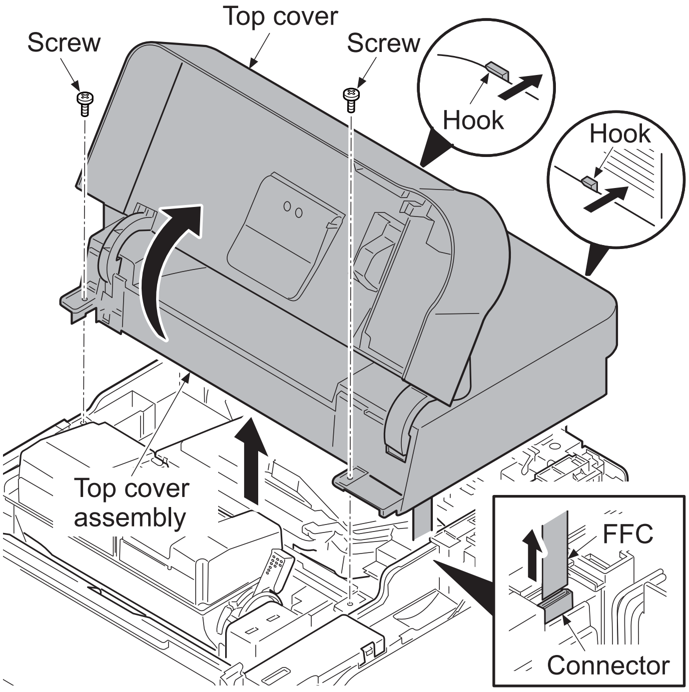
Top cover
Screw
Screw
Hook
Hook
Top cover assembly
FFC
Connector

Figure 1-5-3

(2) Detaching and refitting the inlet cover and slot cover

Procedure

1. Open the rear cover.
2. Remove the inlet cover.
3. Release the hook of the slot cover and then remove the slot cover.

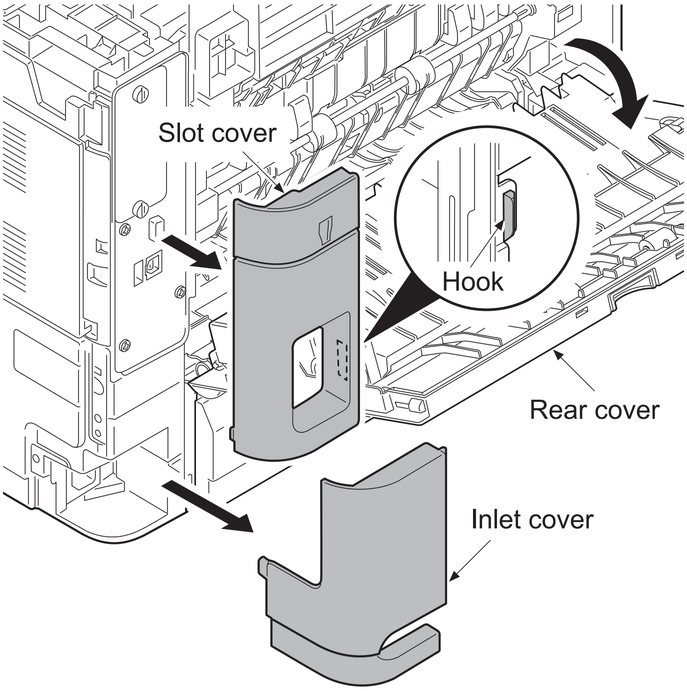
Slot cover
Hook
Rear cover
Inlet cover

Figure 1-5-4

(3) Detaching and refitting the right upper cover

Procedure

1. Open the front cover.
2. Remove the top cover assembly.
   (See page 1-5-3)
3. Remove the slot cover.
   (See page 1-5-3)
4. Remove two screws.
5. Release hook A.
6. Release two hooks B by sliding the right upper cover upward and then remove the right upper cover.

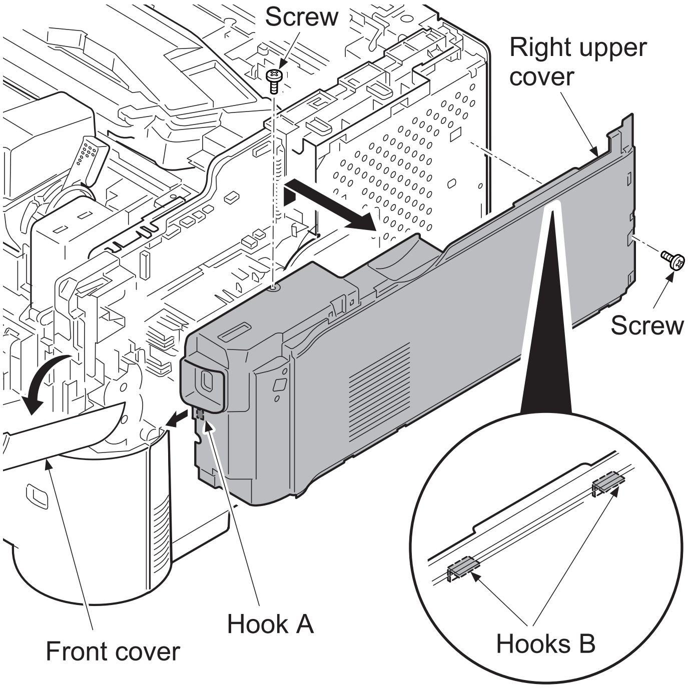
Screw
Right upper cover
Screw
Front cover
Hook A
Hooks B

Figure 1-5-5

(4) Detaching and refitting the right lower cover

Procedure

1. Remove the right upper cover.
   (See page 1-5-4)
2. Remove the inlet cover.
   (See page 1-5-4)
3. Pull out the cassette.
4. Remove three screws.
5. Release two hooks by sliding the right lower cover upward and then remove the right lower cover.

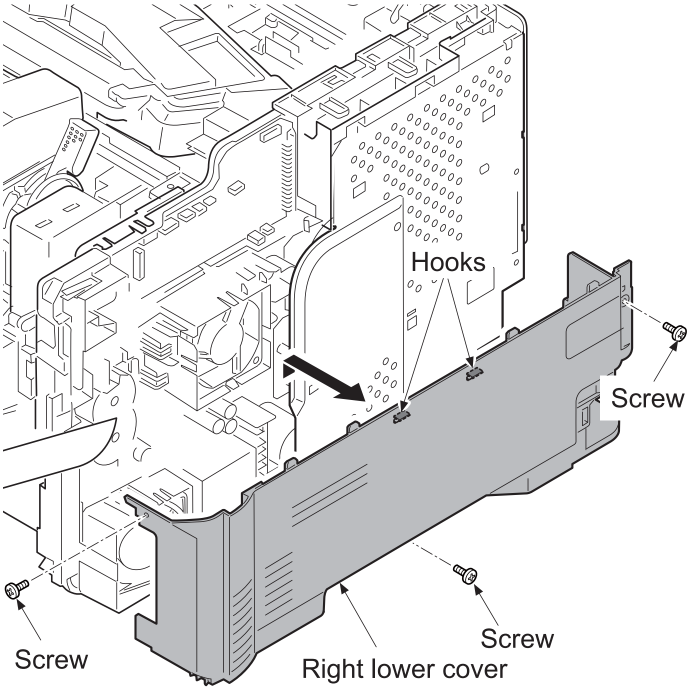
Hooks
Screw
Screw
Screw
Right lower cover

Figure 1-5-6

(5) Detaching and refitting the rear left cover

Procedure

1. Open the rear cover.
2. Release two hooks of the rear left cover while pulling forward.
3. Remove the rear left cover by rotating.

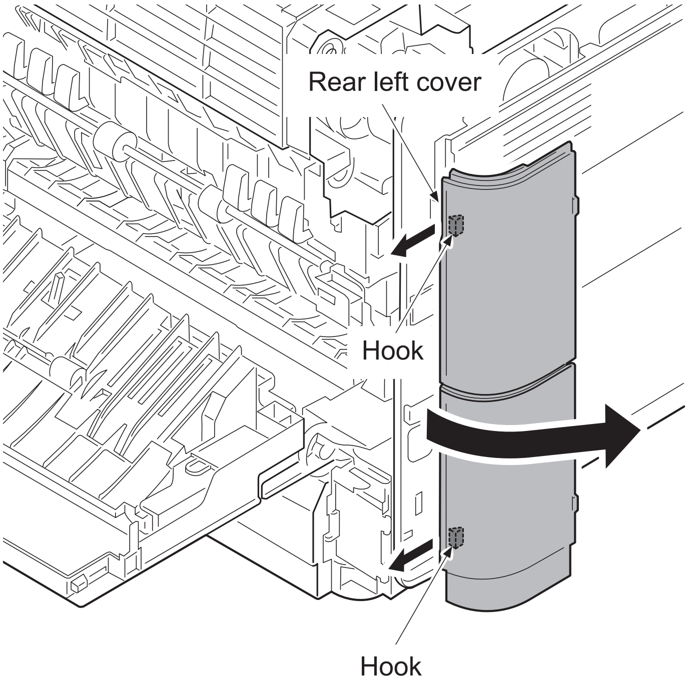
Rear left cover
Hook
Hook

Figure 1-5-7

(6) Detaching and refitting the left upper cover

Procedure

1. Open the front cover.
2. Remove the top cover assembly.
   (See page 1-5-3)
3. Remove the rear left cover.
   (See page 1-5-5)
4. Release the hook A by sliding the left upper cover upward.
5. Release the hook B and hook C and then remove the left upper cover and the waste toner box cover.
   (See page 1-5-5)

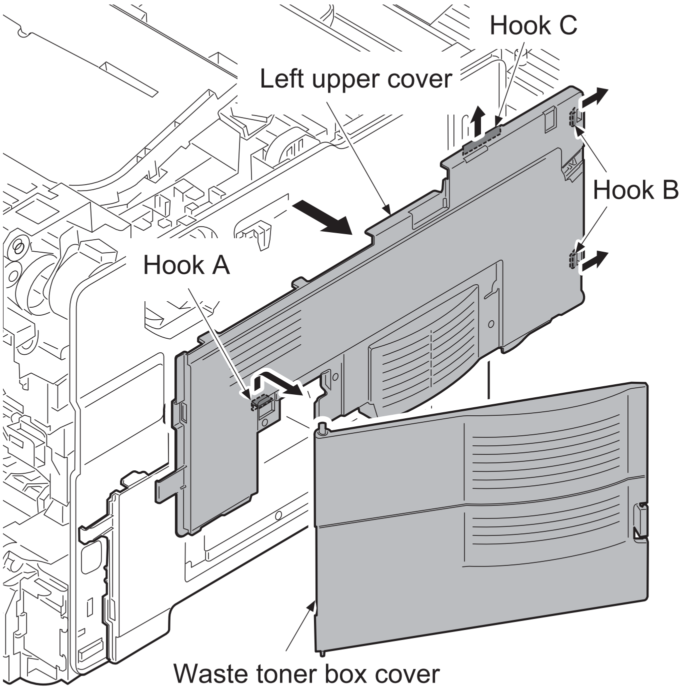
Hook C
Left upper cover
Hook B
Hook A
Waste toner box cover

Figure 1-5-8

(7) Detaching and refitting the left lower cover

Procedure

1. Remove the left upper cover.
   (See page 1-5-5)
2. Pull out the cassette.
3. Remove the rear left lower cover.
   (See page 1-5-5)
4. Remove the screw.
5. Release the hook A.
6. Release two hooks B by sliding the left lower cover upward and then remove the left lower cover.

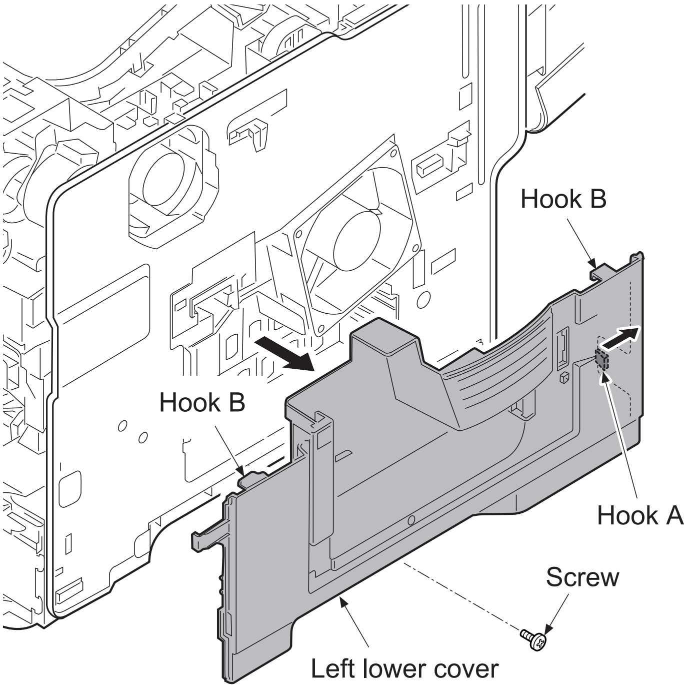
Hook B
Hook B
Hook A
Screw
Left lower cover

Figure 1-5-9

(8) Detaching and refitting the rear cover

Procedure

1. Remove the rear left lower cover.
   (See page 1-5-5)
2. Open the rear cover.

[60/50/45 ppm model only]

3. Remove the screw and then the grounding wire.
4. Open the connector cover and then remove three connectors.

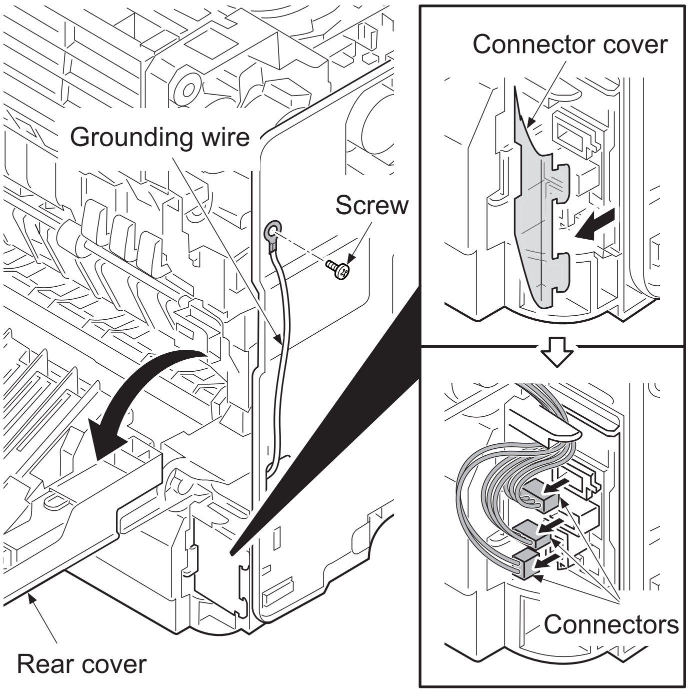
Connector cover
Grounding wire
Screw
Connectors
Rear cover

Figure 1-5-10

5. Remove the fulcrum axis by sliding the rear cover assembly while avoiding rear cover and then remove the rear cover assembly.

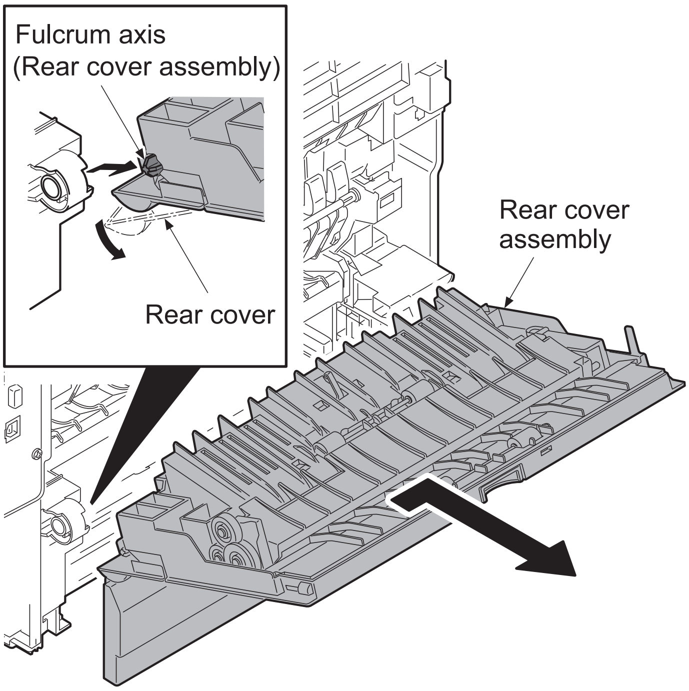
Fulcrum axis
(Rear cover assembly)
Rear cover
Rear cover
assembly

Figure 1-5-11

1-5-3 Paper feed section

(1) Detaching and refitting the paper feed roller

Procedure

1. Pull out the cassette.
2. Release the lock by pulling the lever.
3. Remove the paper feed roller assembly by pulling and raising and then sliding forward.
4. Check or replace the paper feed roller and refit all the removed parts.

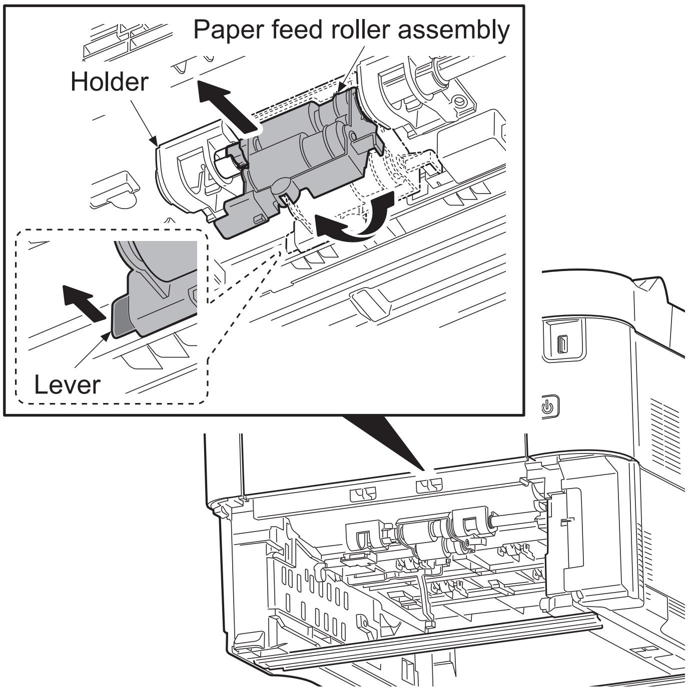
Paper feed roller assembly
Holder
Lever

Figure 1-5-12

(2) Detaching and refitting the retard roller

Procedure

1. Release two hooks in backside of cassette and then remove the retard roller assembly.

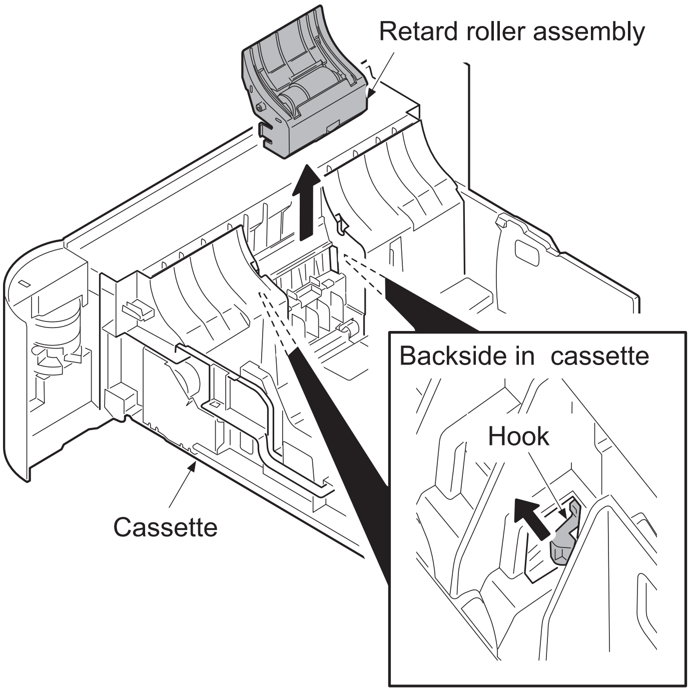
Retard roller assembly
Backside in cassette
Hook
Cassette

Figure 1-5-13

2. Remove the spring.
3. Remove the retard roller holder by rotating.
4. Check or replace the retard roller and refit all the removed parts.

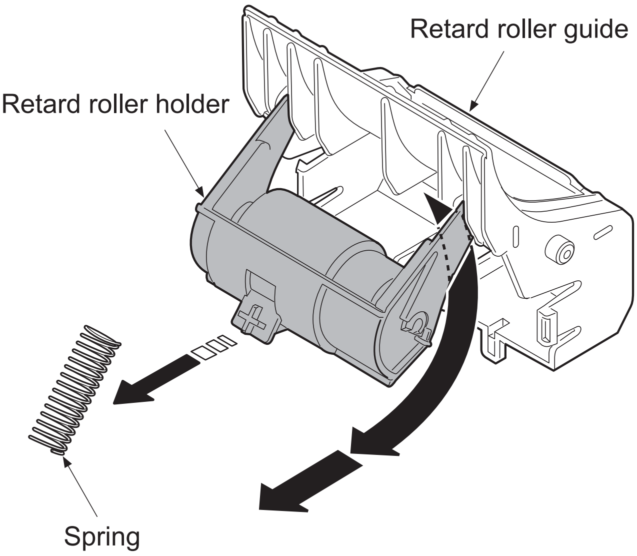
Retard roller guide
Retard roller holder
Spring

Figure 1-5-14

(3) Detaching and refitting the MP paper feed pulley

Procedure

1. Open the top cover.
2. Open the front cover.
3. Remove the MP tray from the printer while bending it.

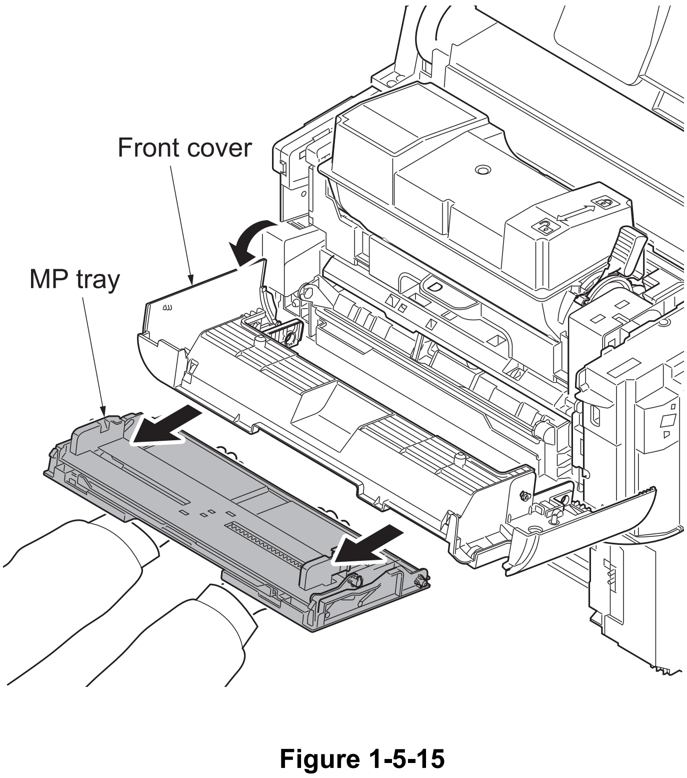
Front cover
MP tray

Figure 1-5-15

4. Remove the fulcrum of leftside by extending a cover.
5. Remove the fulcrum of rightside during twisting a cover.
6. Remove the front cover forward.

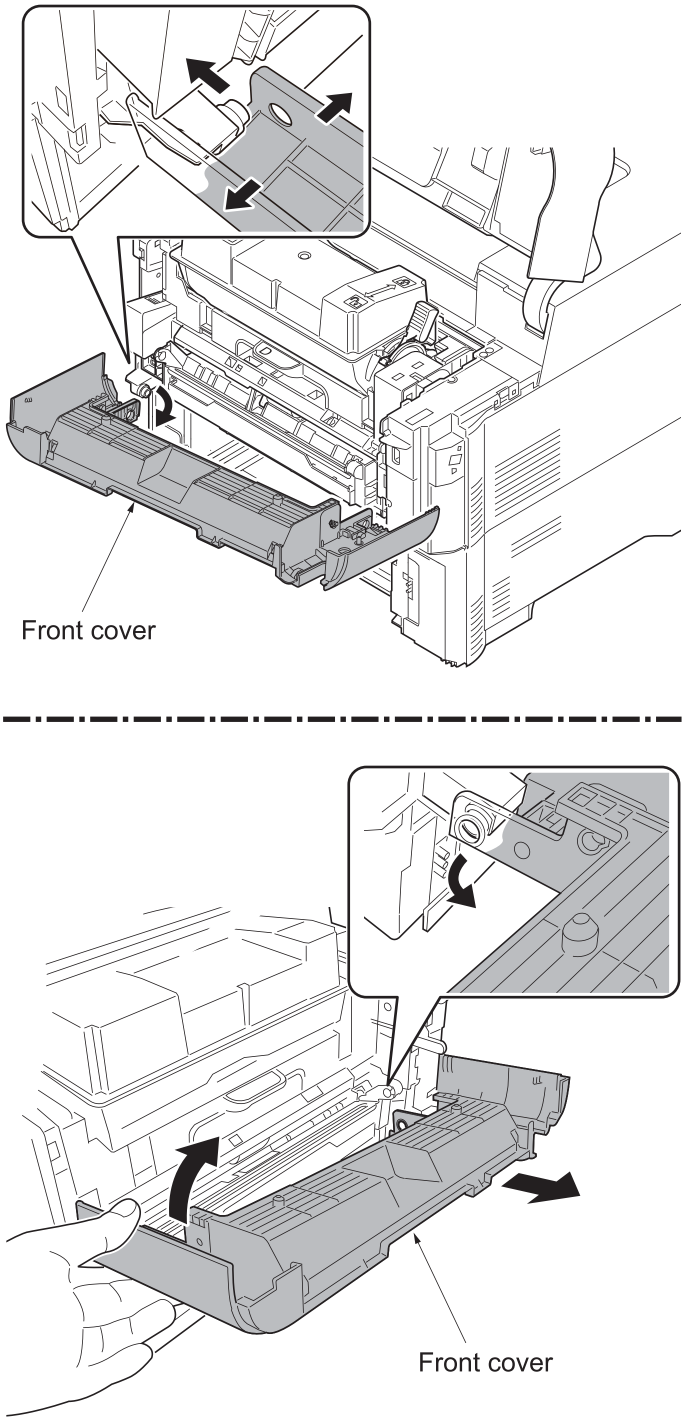
Front cover
Front cover

Figure 1-5-16

7. Remove two screws on the MP paper feed unit.

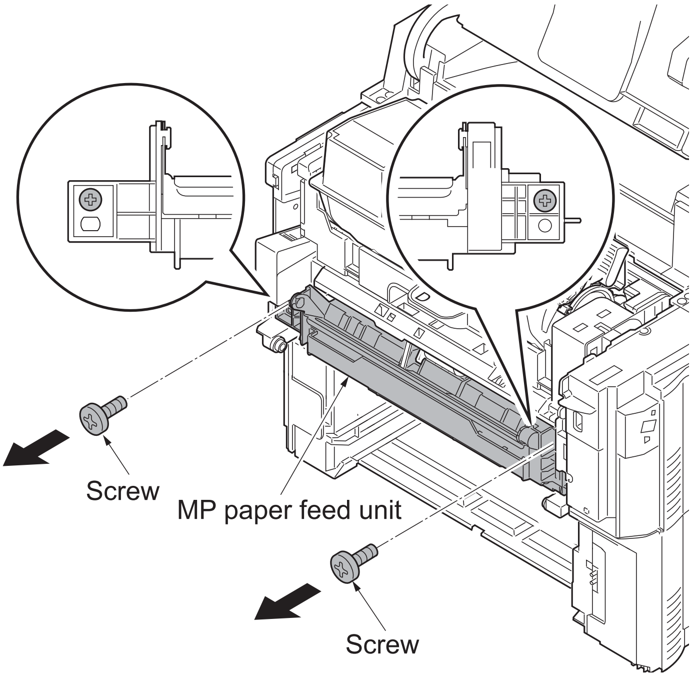
Screw
MP paper feed unit
Screw

Figure 1-5-17

8. Remove the MP paper feed unit from the printer.

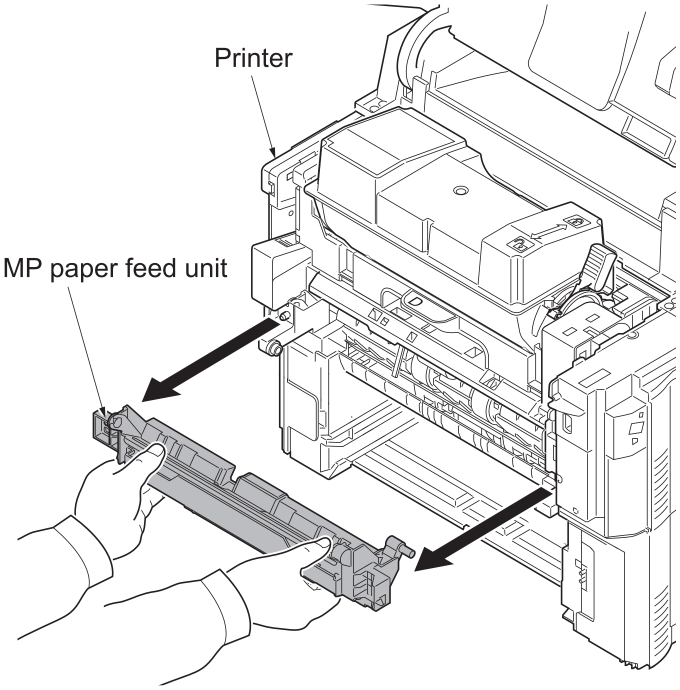
Printer
MP paper feed unit

Figure 1-5-18

9. Release the lock lever and then slide the MP paper feed pulley axis.
10. Remove MP paper feed pulley.
11. Check or replace the MP paper feed pulley and refit all the removed parts.

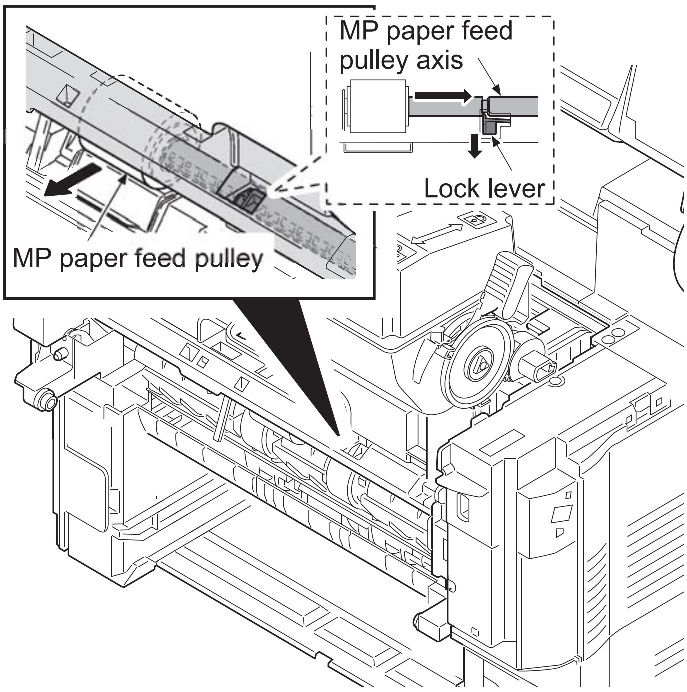
MP paper feed pulley axis
Lock lever
MP paper feed pulley

Figure 1-5-19

1-5-4 Developer section

(1) Detaching and refitting the developer unit

Procedure

1. Open the top cover.
2. Release the lock lever by rotating and then remove the toner container.

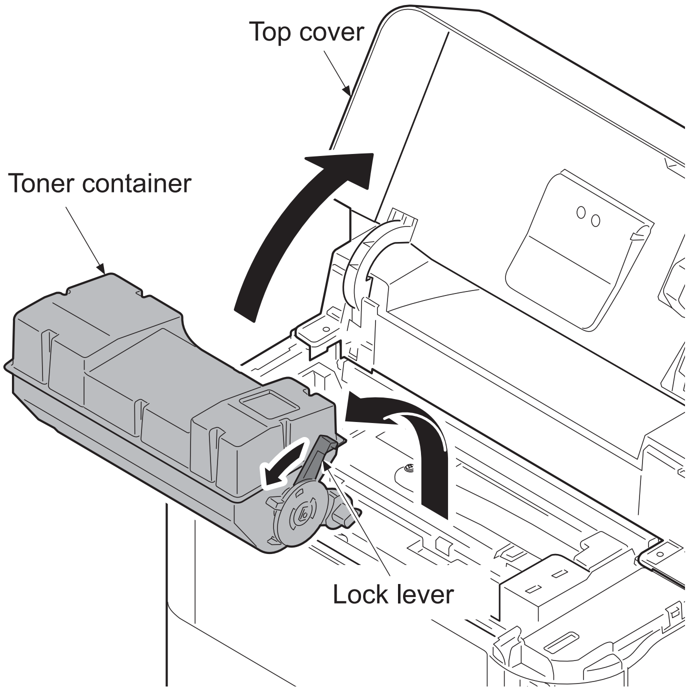
Top cover
Toner container
Lock lever

Figure 1-5-20

3. Open the front cover.
4. Pull the imaging unit forward.
5. Release the hook and then remove the container guide by sliding backwards.

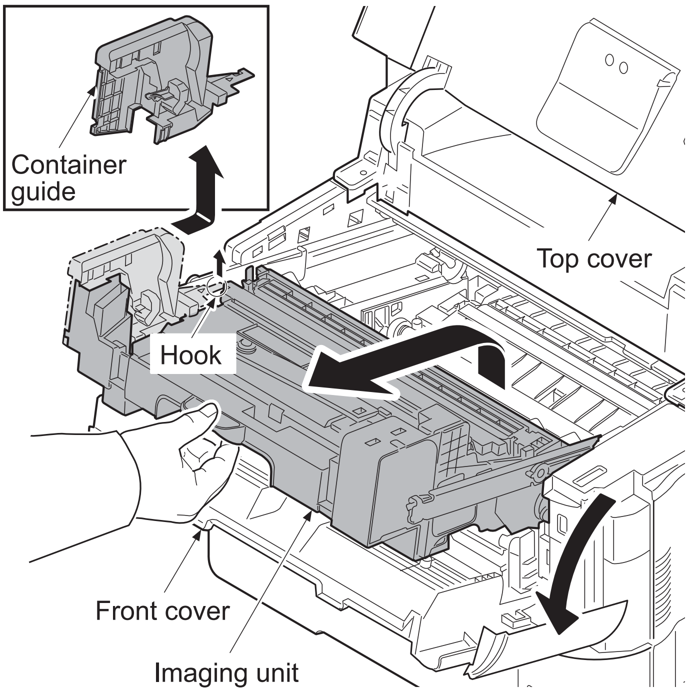
Container guide
Top cover
Hook
Front cover
Imaging unit

Figure 1-5-21

6. Pull the connector out.
7. Release the lock lever and then remove the developer unit upward.
8. Check or replace the developer unit and refit all the removed parts.

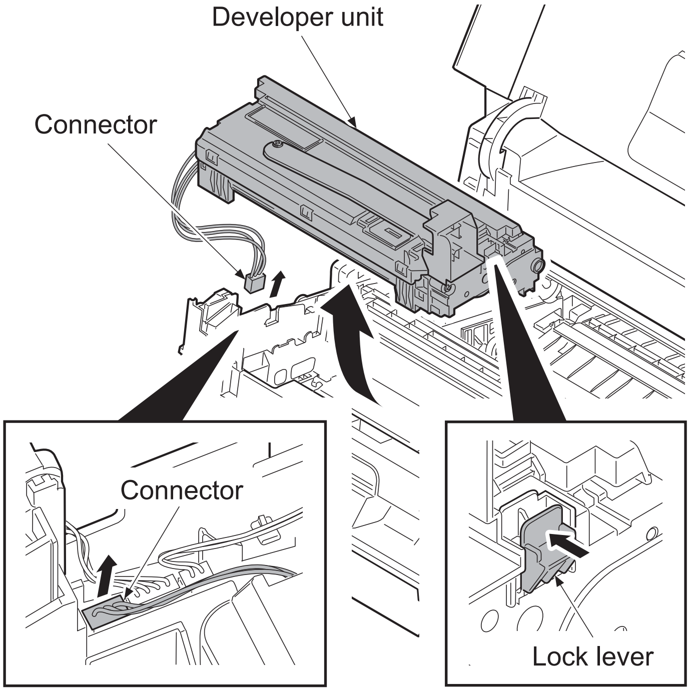
Developer unit
Connector
Connector
Lock lever

Figure 1-5-22

1-5-5 Drum section

(1) Detaching and refitting the drum unit

Procedure

1. Remove the developer unit.
   (See page 1-5-13)
2. Remove the lock lever L.
3. Remove the lock lever R by sliding backward.
4. Remove the drum unit by sliding forward.
5. Check or replace the drum unit and refit all the removed parts.

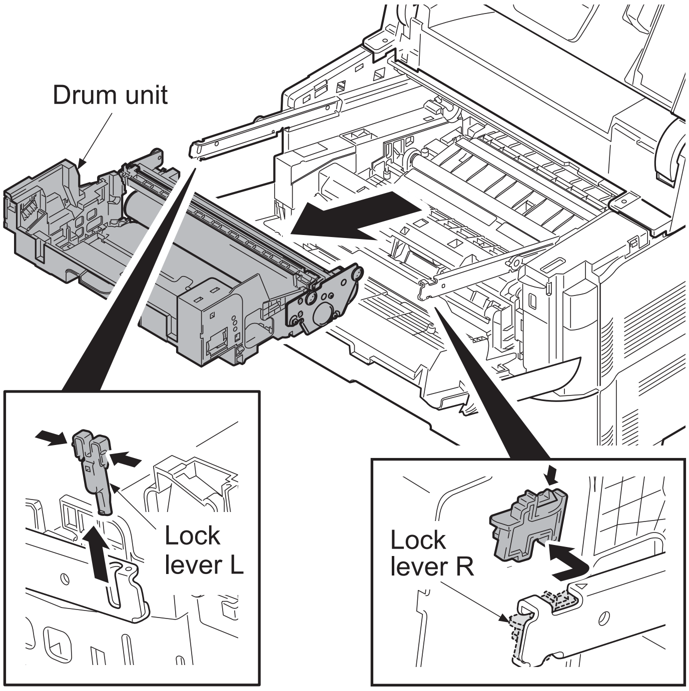
Drum unit
Lock lever L
Lock lever R

Figure 1-5-23

(2) Detaching and refitting the chager roller unit

Procedure

1. Release the lock lever and then remove the chager roller unit.
2. Check or replace the charger roller unit and refit all the removed parts.

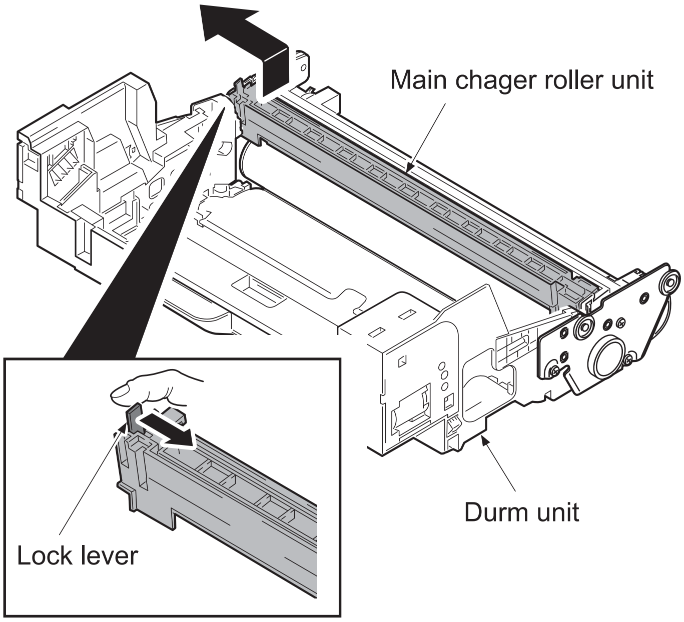
Main chager roller unit
Durm unit
Lock lever

Figure 1-5-24

1-5-6 Transfer/separation section

(1) Detaching and refitting the transfer roller assembly

Procedure

1. Release four hooks by sliding to left the paper chute guide.
2. Remove the paper chute guide upward.

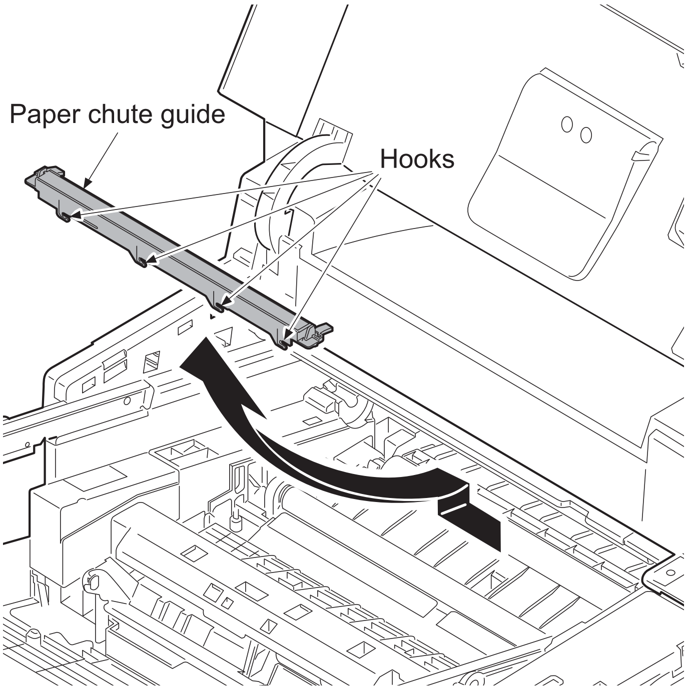
Paper chute guide
Hooks

Figure 1-5-25

3. Remove the axes of transfer roller from each bush.
4. Remove the transfer roller assembly upward.
5. Check or replace the transfer roller assembly and refit all the removed parts.

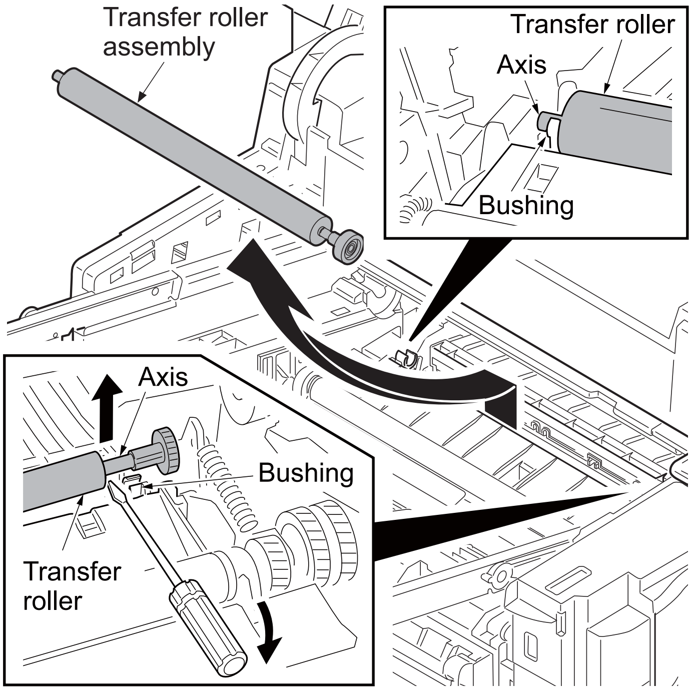
Transfer roller assembly
Transfer roller
Axis
Bushing
Axis
Bushing
Transfer roller

Figure 1-5-26

(2) Detaching and refitting the separation needle unit

Procedure

1. Remove the transfer roller unit.
   (See page 1-5-16)
2. Release four hooks of separation needle unit by rotating and then remove the separation needle unit upward.
3. Check or replace the separation needle unit and refit all the removed parts.

Caution: Check certainly being fixed at the time of attachment.

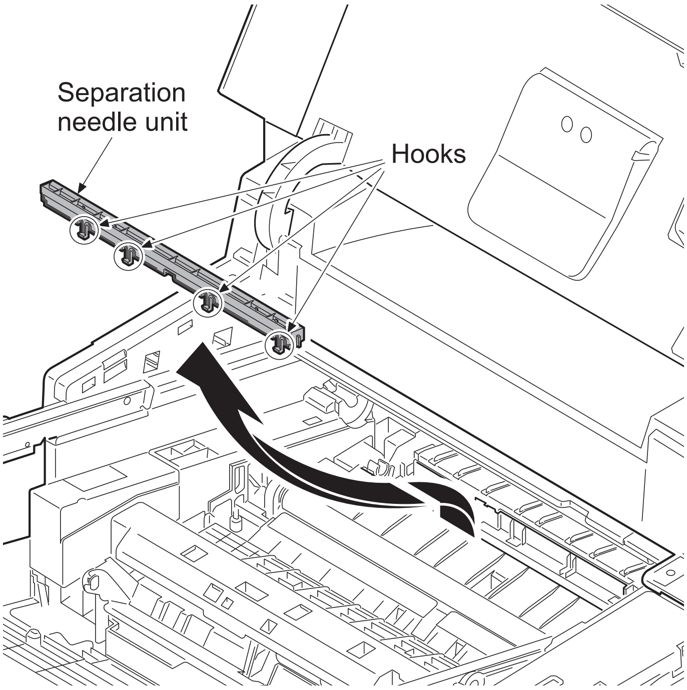

Figure 1-5-27

1-5-7 Optical section

(1) Detaching and refitting the laser scanner unit

Procedure

1. Remove the top cover assembly.
   (See page 1-5-3)
2. Remove the right upper cover.
   (See page 1-5-4)
3. Pull the connector and FFC from engine PWB out.
4. Release the wires from the wire guide.
5. Remove four screws and then remove the laser scanner unit upward.
6. Check or replace the laser scanner unit and refit all the removed parts.

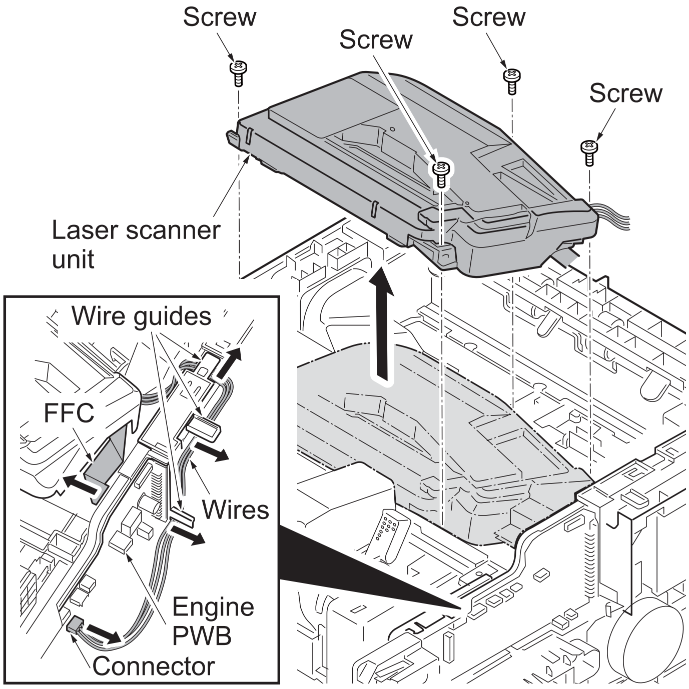
Screw
Screw
Screw
Screw
Laser scanner unit
Wire guides
FFC
Wires
Engine PWB
Connector

Figure 1-5-28

1-5-8 Fuser section

(1) Detaching and refitting the fuser unit

Procedure

1. Remove the rear cover.
   (See page 1-5-6)
2. Remove the screw and then remove the connector cover A.
3. Pull two connectors out.

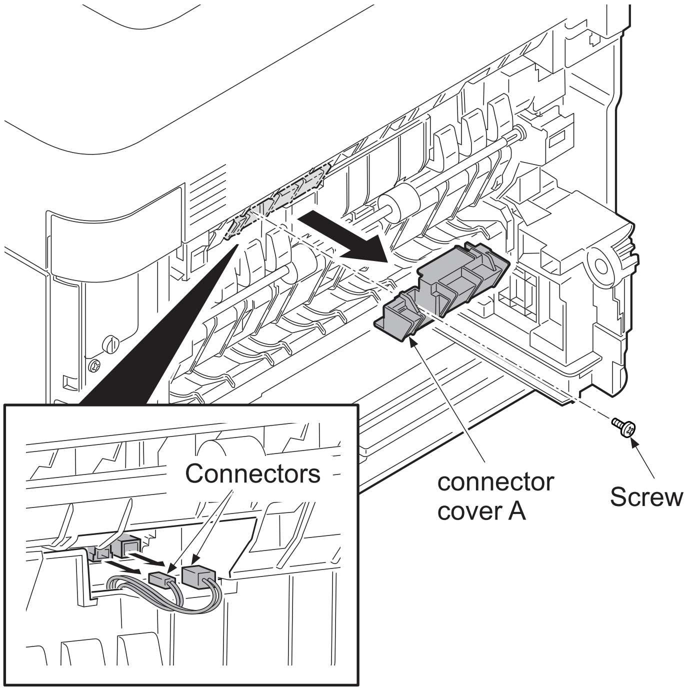
Connectors
connector cover A
Screw

Figure 1-5-29

4. Remove the connector cover B by releasing the hook.
5. Remove the screw of connector cover C.
6. Remove the connector cover C by releasing the hook.
7. Pull two connectors out.

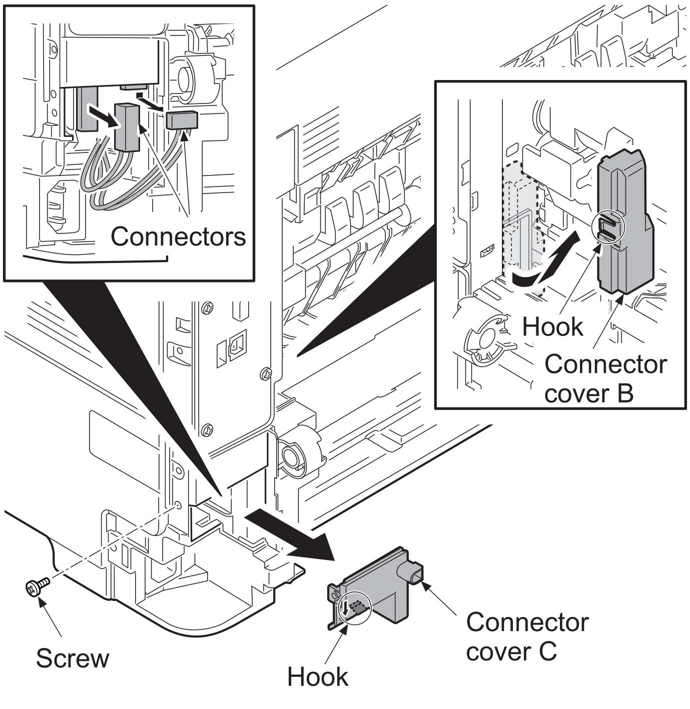
Connectors
Hook
Connector cover B
Screw
Hook
Connector cover C

Figure 1-5-30

[60/50/45 ppm model]

8. Remove the screw and then remove the fuser unit forward.
9. Check or replace the fuser unit and refit all the removed parts.

Caution: when refitting the fuser unit, perform the following procedures.

(1)Turn on the power switch while opening the rear cover after removing the fuser unit.
(2)Turn off the power switch after 5-second or more progress.
(release state of fixing pressure)
(3)Refit the fuser unit.

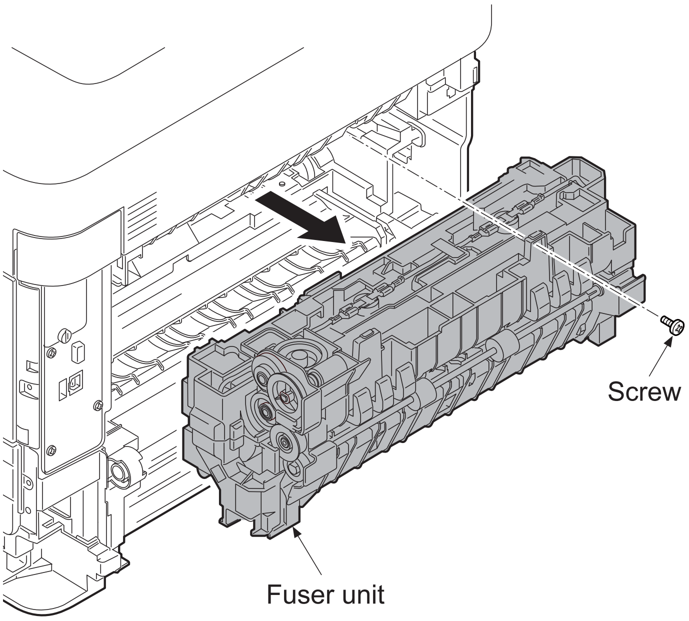

Figure 1-5-31

[40 ppm model]

8. Pull up the release lever of fixing pressure.
9. Remove the screw and then remove the fuser unit forward.
10. Check or replace the fuser unit and refit all the removed parts.

Caution: Pull down the release lever of fixing pressure after refitting the fuser unit.(pressurization state)

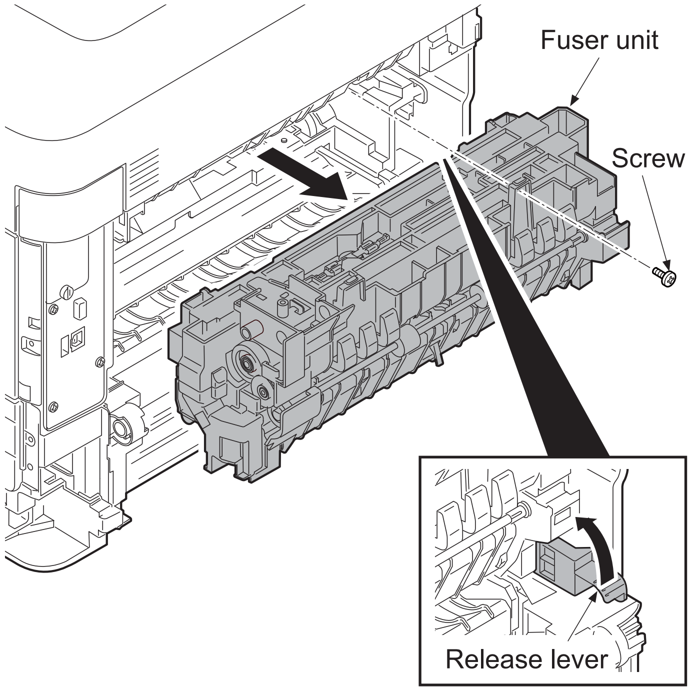

Figure 1-5-32

1-5-9 ejection section

(1) Detaching and refitting the ejection unit

Procedure

1. Remove the top cover assembly. (See page 1-5-3)
2. Remove the right upper cover and the right lower cover. (See page 1-5-4)
3. Remove the left upper cover. (See page 1-5-5)
4. Remove the controller box cover. (See page 1-5-25)
5. Pull the connector out and then release the wires from Hooks.
6. Remove three screws and then remove the ejection unit.
7. Check or replace the ejection unit and refit all the removed parts.

*1: 60/50/45 ppm model only
*2: 40 ppm model only

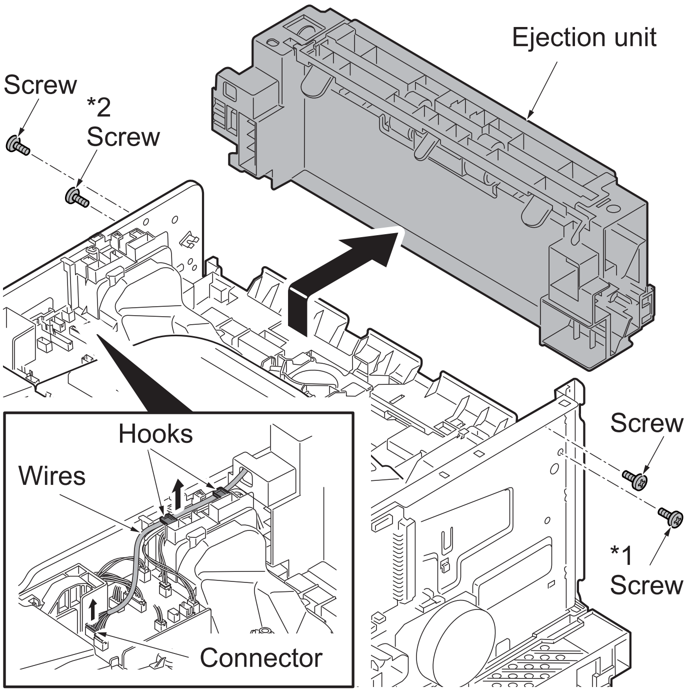
Ejection unit
Screw
*2
Screw
Screw
*1
Screw
Hooks
Wires
Connector

Figure 1-5-33

1-5-10 PWBs

(1) Detaching and refitting the main PWB

Procedure

1. Remove the inlet cover and the slot cover.(See page 1-5-3)
2. Unplug the power cable.

   Caution: Do not insert or remove main PWB assembly while machine power is on.
   Doing so may cause damage to the machine and the main PWB.

3. Remove five screws and then pull the main PWB assembly out forward.
4. Check or replace the main PWB and refit all the removed parts.

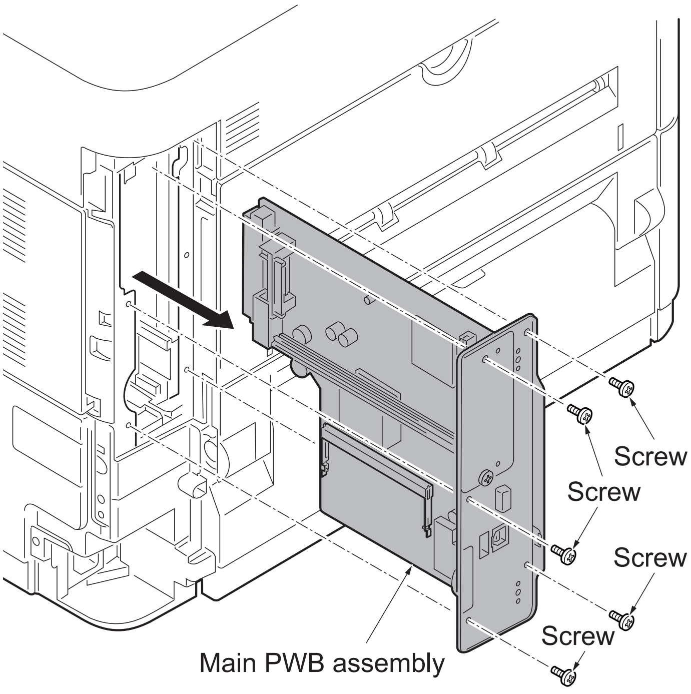
Screw
Screw
Screw
Screw
Screw
Main PWB assembly

Figure 1-5-34

(2) Detaching and refitting the engine PWB

Procedure

1. Remove the top cover assembly. (See page 1-5-3)
2. Remove the right upper cover. (See page 1-5-4)
3. Remove the main PWB assembly. (See page 1-5-22)
4. Remove the screw and then the grounding terminal.
5. Release the wires and FFC from hooks.
6. Release the fixing hook and then remove the wire guide.

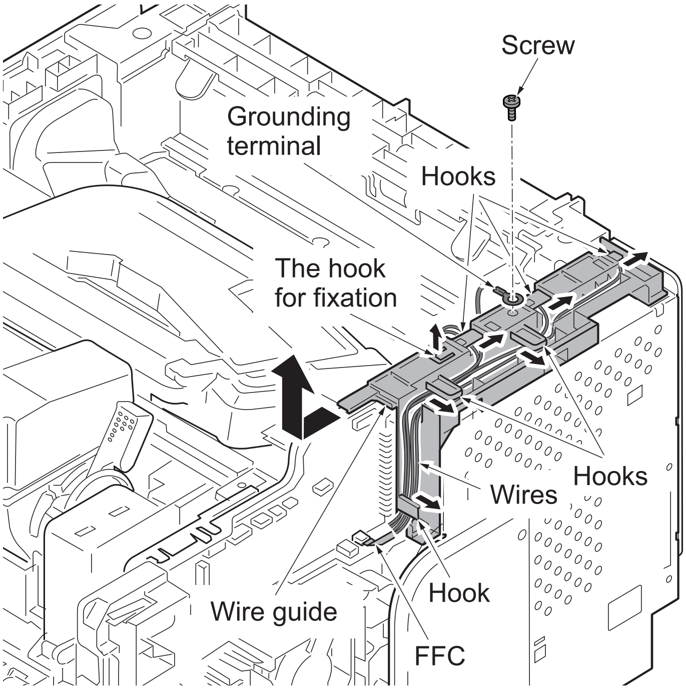
Screw
Grounding terminal
Hooks
The hook for fixation
Hooks
Wires
Hook
Wire guide
FFC

Figure 1-5-35

7. Pull two connectors out.
8. Remove the screw and two hooks and then remove the wire guide.

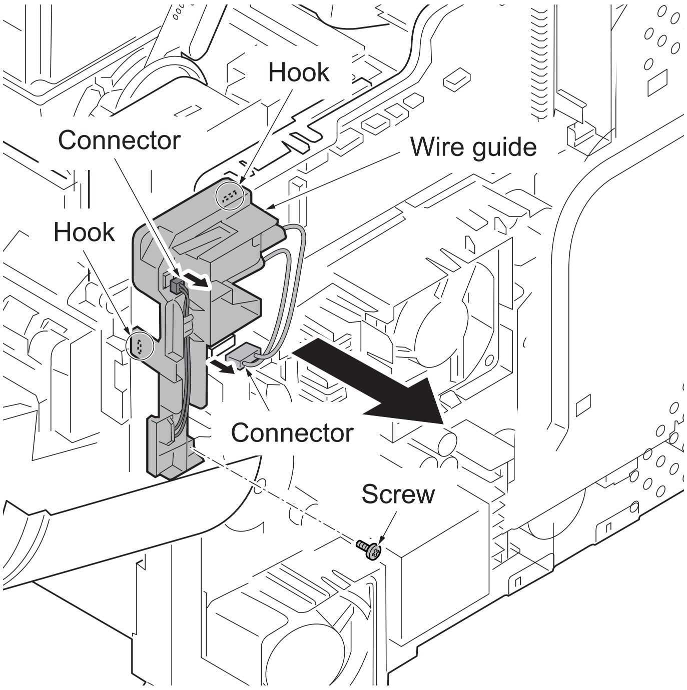
Hook
Connector
Wire guide
Hook
Connector
Screw

Figure 1-5-36

9. Pull all connectors out from main PWB.
10. Remove four screws and then remove the engine PWB.
11. Check or replace the engine PWB and refit all the removed parts.

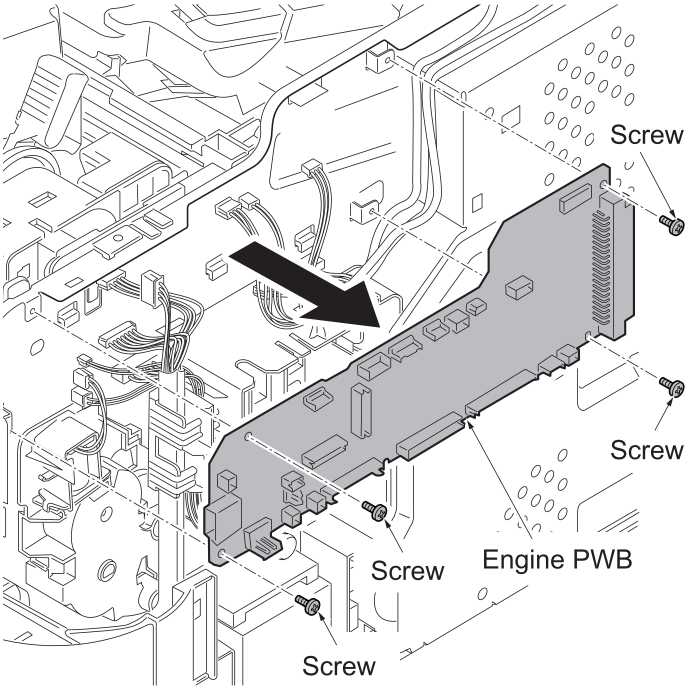
Screw
Screw
Screw
Engine PWB
Screw

Figure 1-5-37

(3) Detaching and refitting the relay-L PWB

Procedure

1. Remove the top cover assembly.
   (See page 1-5-3)
2. Pull the connectors out from relay-L PWB and then release the wires from hooks.
3. Remove the LSU fan motor assembly upward.

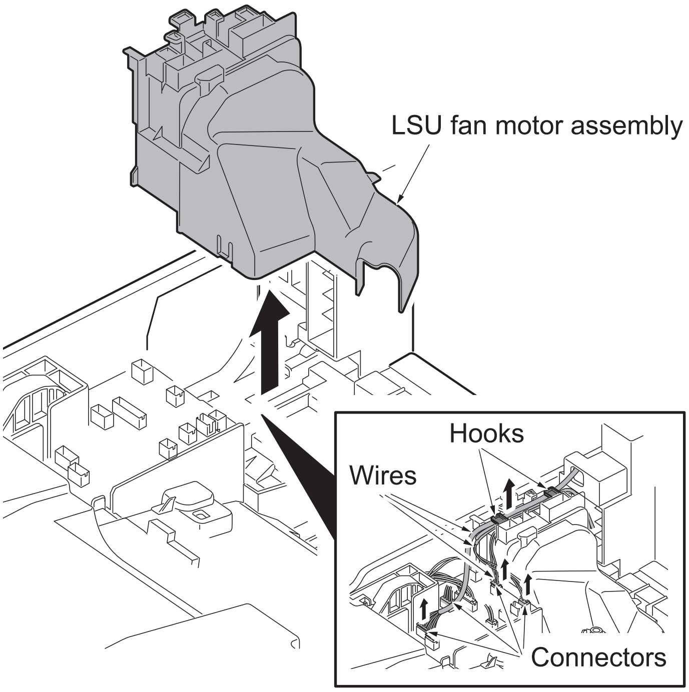
LSU fan motor assembly
Hooks
Wires
Connectors

Figure 1-5-38

4. Pull the connectors and FFC out and then remove the relay-L PWB.
5. Check or replace the relay-L PWB and refit all the removed parts.

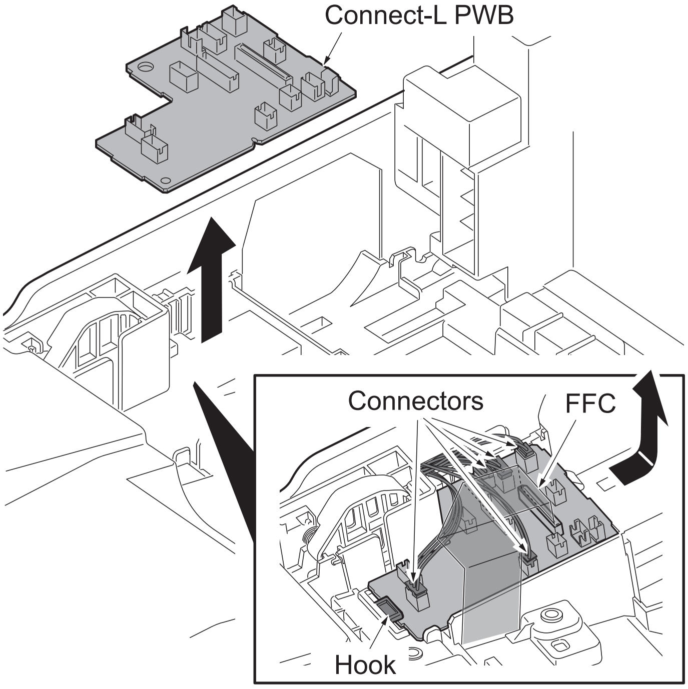
Connect-L PWB
Connectors
FFC
Hook

Figure 1-5-39

(4) Detaching and refitting the power source PWB

Procedure

1. Remove the top cover assembly.
   (See page 1-5-3)
2. Remove the right upper cover.
   (See page 1-5-4)
3. Remove the right lower cover.
   (See page 1-5-4)
4. Remove the main PWB.
   (See page 1-5-22)
5. Remove the wire guide.
   (See page 1-5-22)
6. Remove three screws and then remove the controller box cover.

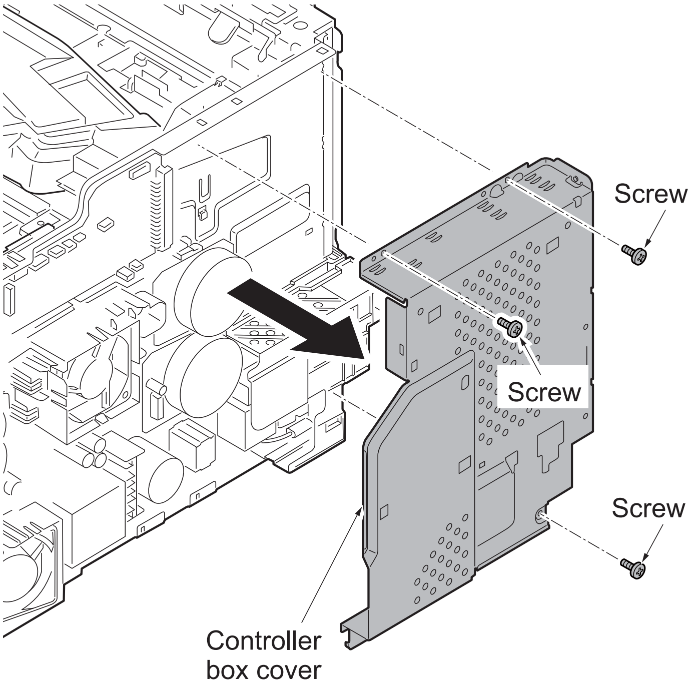
Screw
Screw
Screw
Controller
box cover

Figure 1-5-40

7. Remove the grounding wire by removing the screw.
8. Remove three screws and then remove the power source PWB assembly.
9. Check or replace the power source PWB and refit all the removed parts.

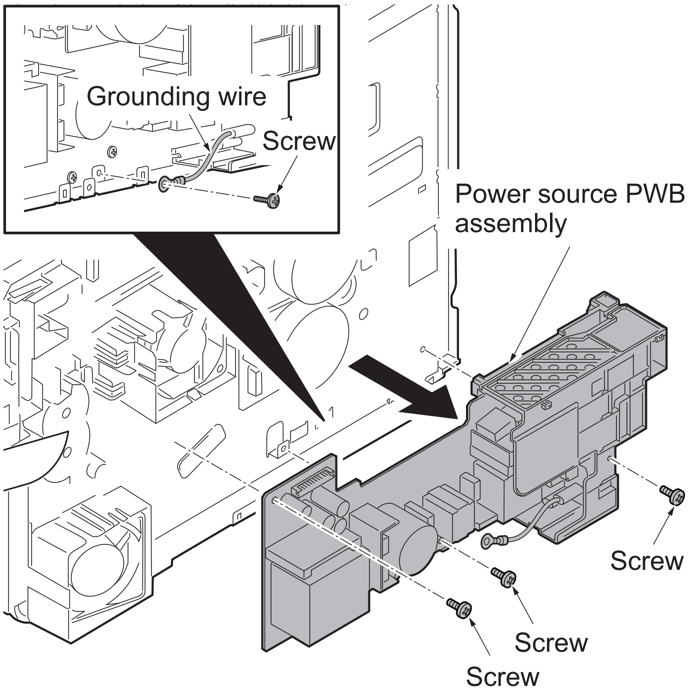
Grounding wire
Screw
Power source PWB
assembly
Screw
Screw
Screw

Figure 1-5-41

(5) Detaching and refitting the high voltage PWB

Procedure

1. Remove the cassette.
2. Remove the right upper cover and the right lower cover. (See page 1-5-4)
3. Remove the left upper cover and the left lower cover. (See page 1-5-6)
4. Remove the power source fan motor. (See page1-5-30)
5. Remove the power source PWB. (See page1-5-25)
6. Stand the printer front side up.
7. Remove four screws each and then remove the bottom plate 1 and the bottom plate 2.

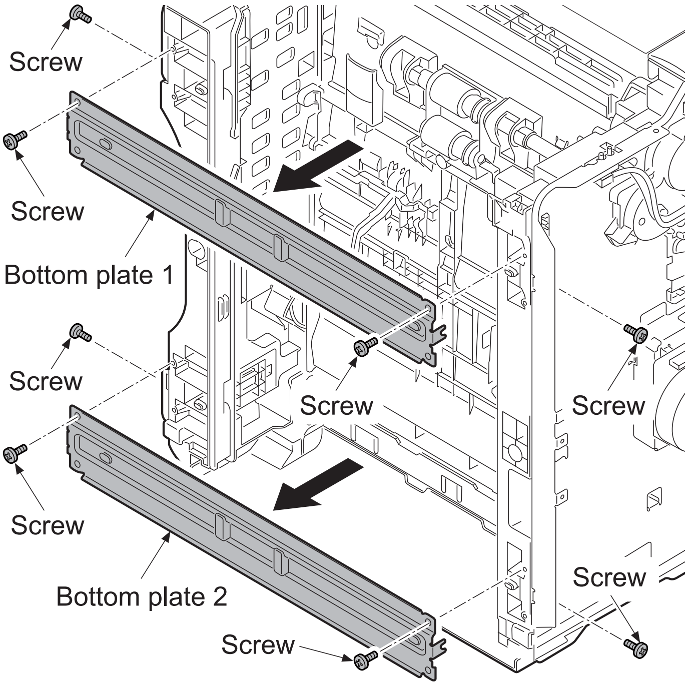
Screw
Screw
Bottom plate 1
Screw
Screw
Screw
Screw
Bottom plate 2
Screw
Screw

Figure 1-5-42

8. [60/50/45 ppm model only]
   Release two hooks and then remove the wire cover.
   Pull the connector of lift sensor out.

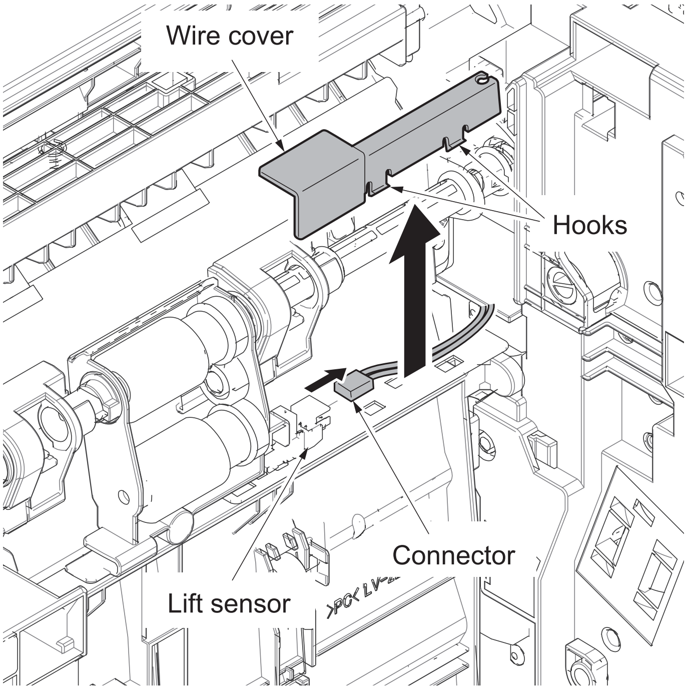
Wire cover
Hooks
Connector
Lift sensor

Figure 1-5-43

9. Remove seven screws.
10. Extract the feed roller axis by pushing the joint part.
11. Remove the DU assy to the front.

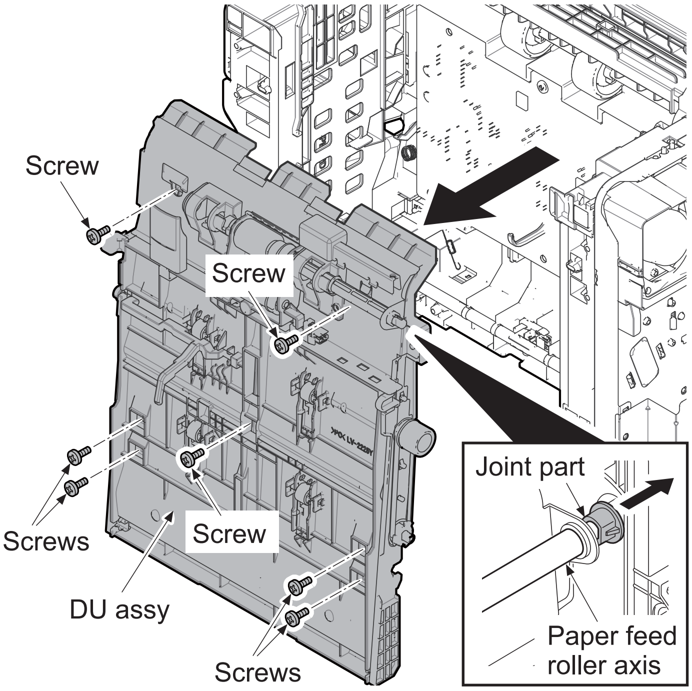
Screw
Screw
Screws
Screw
DU assy
Screws
Joint part
Paper feed roller axis

Figure 1-5-44

12. Remove the screw.
13. Pull two connectors out and then remove the high voltage PWB.
14. Check or replace the high voltage PWB and refit all the removed parts.

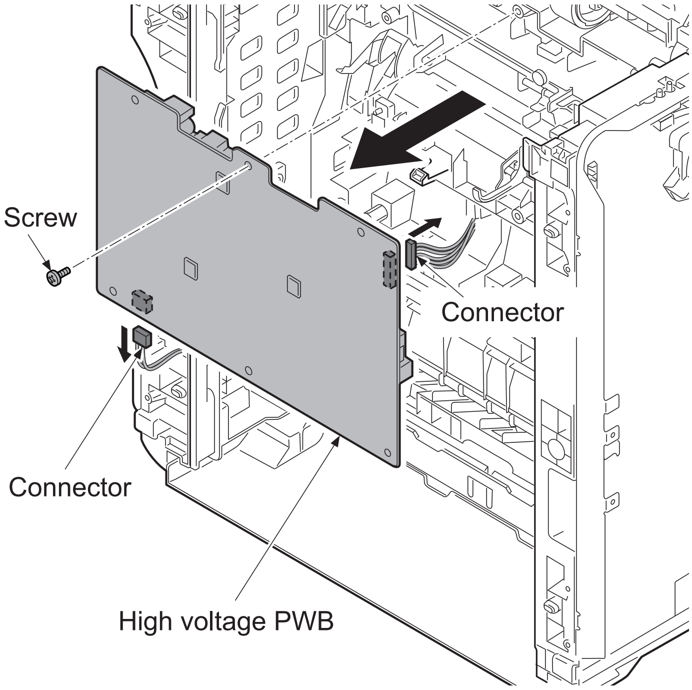
Screw
Connector
Connector
High voltage PWB

Figure 1-5-45

(6) Detaching and refitting the operation PWB

Procedure

1. Open the top cover.
2. Remove the JAM processing procedure sheet.
3. Remove three screws.

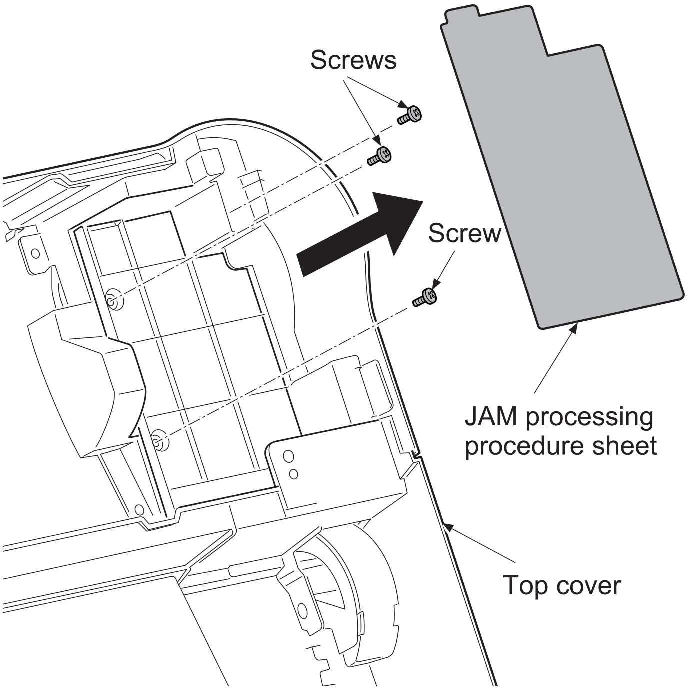
Screws
Screw
JAM processing procedure sheet
Top cover

Figure 1-5-46

4. Rotate the operation PWB cover.
5. Remove the screw and then remove the operation PWB.
6. Check or replace the operation PWB and refit all the removed parts.

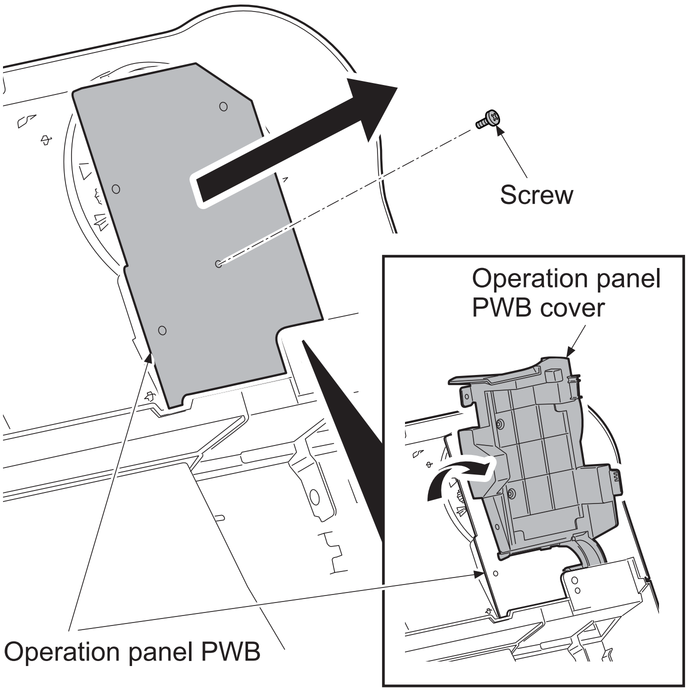
Screw
Operation panel PWB cover
Operation panel PWB

Figure 1-5-47

1-5-11 Others

(1) Detaching and refitting the main driving motor unit

Procedure

1. Remove the right upper cover. (See page 1-5-4)
2. Remove the right lower cover. (See page 1-5-4)
3. Pull the connector out from the motor and then release the wires from wire holder.
4. Remove three screws and then remove the main driving motor unit.
5. Check or replace the main driving motor unit and refit all the removed parts.

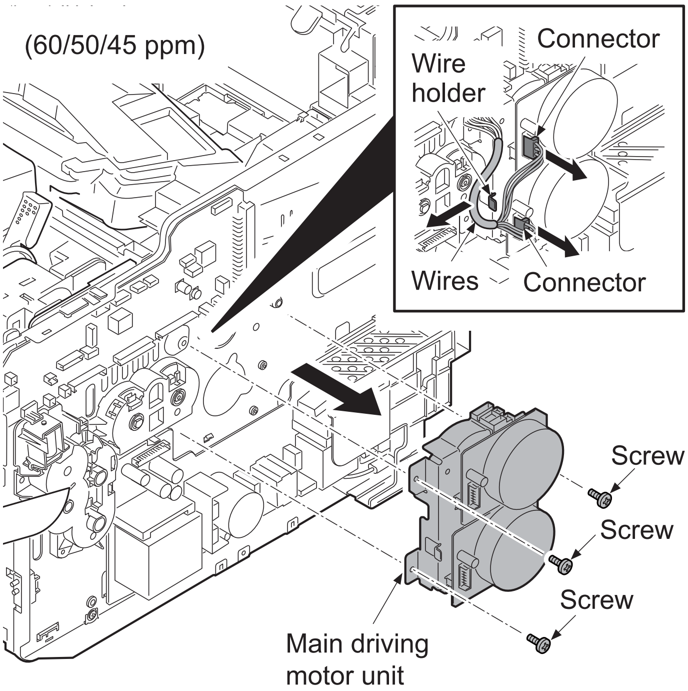
(60/50/45 ppm)
Connector
Wire holder
Wires
Connector
Screw
Screw
Screw
Main driving motor unit

Figure 1-5-48

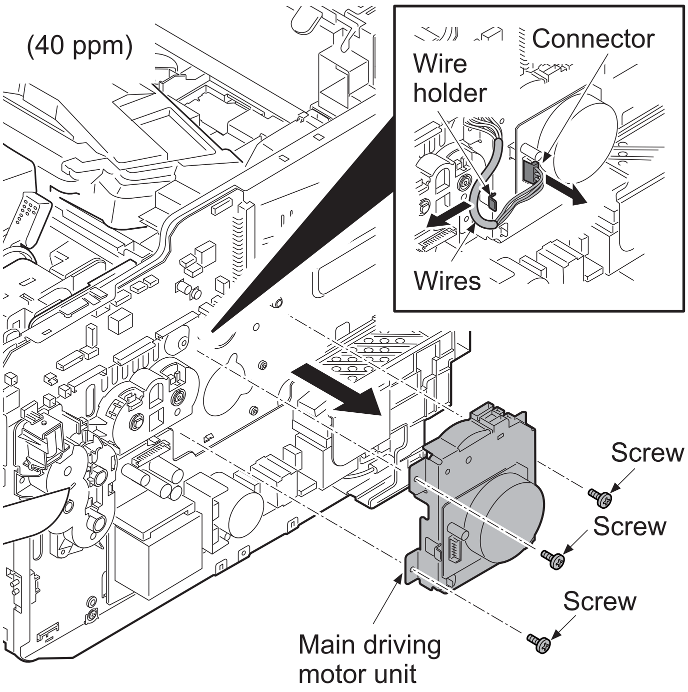
(40 ppm)
Connector
Wire holder
Wires
Screw
Screw
Screw
Main driving motor unit

Figure 1-5-49

(2) Detaching and refitting the paper feed driving motor unit

Procedure

1. Remove the right upper cover.
   (See page 1-5-4)
2. Remove the right lower cover.
   (See page 1-5-4)
3. Pull the connectors of clutches and solenoid out.
4. Remove three screws and then remove the paper feed driving motor unit.
5. Check or replace the paper feed driving motor unit and refit all the removed parts.

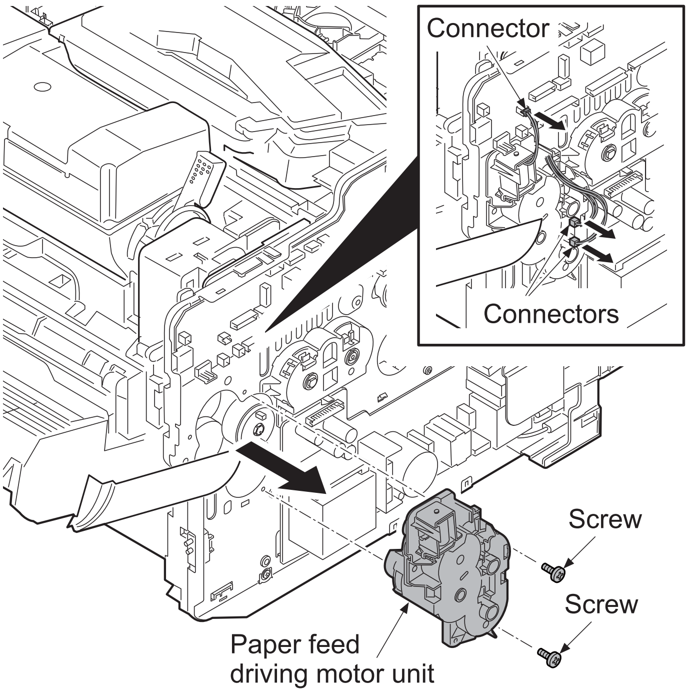
Connector
Connectors
Screw
Screw
Paper feed driving motor unit

Figure 1-5-50

(3) Detaching and refitting the power source fan motor

Procedure

1. Remove the right upper cover.
   (See page 1-5-4)
2. Remove the right lower cover.
   (See page 1-5-4)
3. Pull the connector of the power source fan motor wire out.
4. Release three hooks using flat-blade screwdriver and then remove the power source fan motor assembly.
5. Check or replace the power source fan motor and refit all the removed parts.

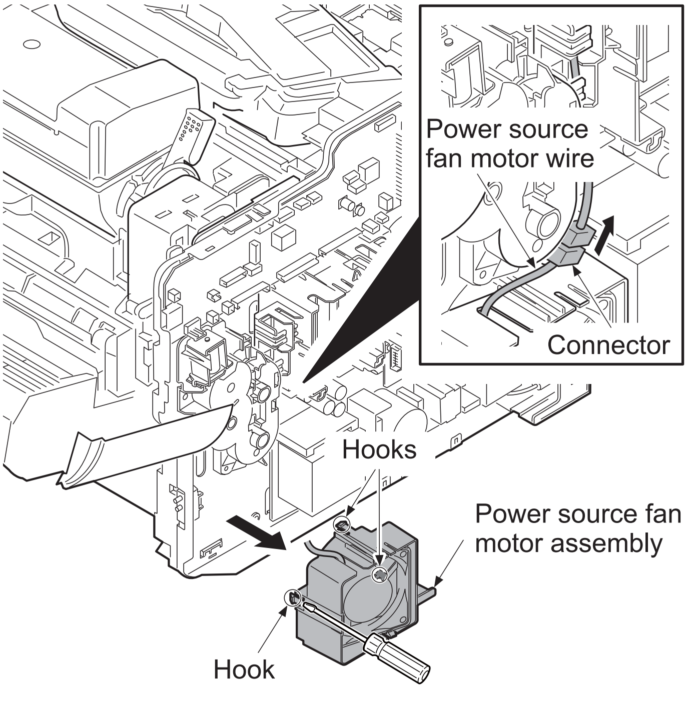
Power source fan motor wire
Connector
Hooks
Power source fan motor assembly
Hook

Figure 1-5-51

(4) Direction of installing the principal fan motors

When detaching or refitting the fan motor, be careful of the airflow direction (intake or exhaust).

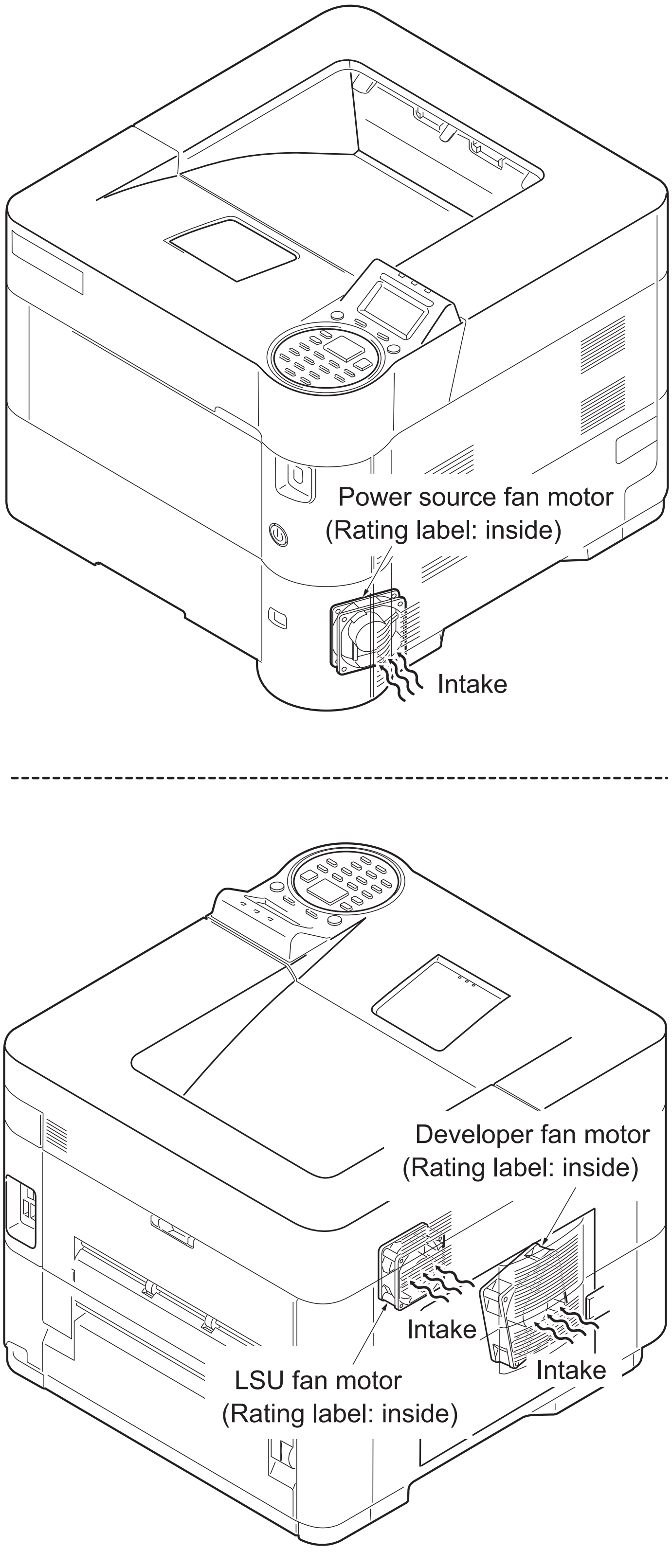
Power source fan motor
(Rating label: inside)
Intake
Developer fan motor
(Rating label: inside)
Intake
Intake
LSU fan motor
(Rating label: inside)

Figure 1-5-52

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1-6-1 Upgrading the firmware

Follow the procedure to upgrade the firmware below.

* Main PWB (CTRL)	* PF main PWB (PF)
* Engine PWB (ENGN)	* Language data (OPT)

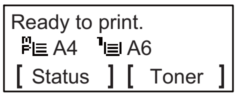
Preparation

Extract the file that has the download firmware and put them in the USB Memory.

NOTE: To improve Firmware Upgrade speed, a separate SKIP file can be added to the USB Memory Stick with the Firmware Upgrade package. The Skip file will allow ONLY the Firmware that has been Upgraded to a New Version to load, skipping duplicate Firmware Levels.

Procedure

1. Turn ON the power switch and confirm if the screen shows “Ready to print” then, turn OFF the power switch.



Ready to print.
A4 A6
[Status] [Toner]

2. Insert USB memory that has the firmware in the USB host interface slot.
3. Turn ON the power switch.
4. About 50 seconds later, “FW-Update” will be displayed (this shows to start the download).
5. Display the software that now upgrading.

   CTRL → PF1 → PF2 →PF3 → PF4 → ENGN → OPT

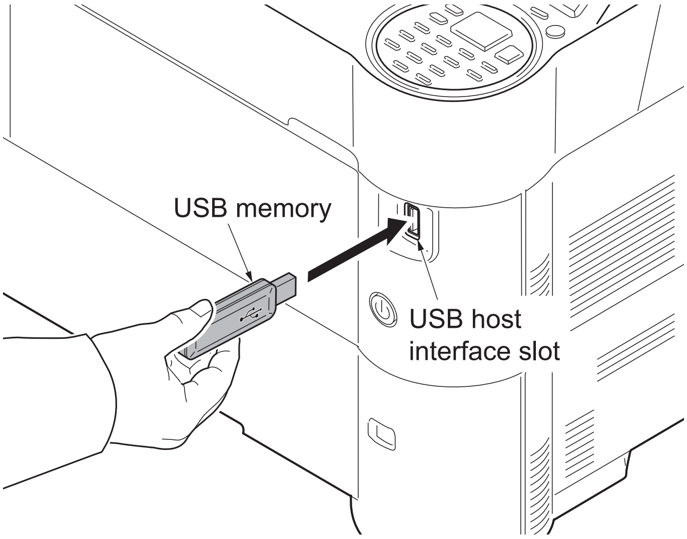


Figure 1-6-1

```
SAMPLE:  =================
           FW-Update [CTRL]     The first line:      Display that shows update object
           ■■■■■□□□□            The second line:  The progress bar that shows update advance degree
         =================
```

Caution:

Never turn off the power switch or remove the USB flash device during upgrading.

6. Display the completion of the upgrade.

```
(The 1st page)                    (2 page or subsequent ones)
  =================                 =================
    FW-Update                          [ENGN]          2/8
            Completed                   2LV_3F00.001.014
  =================                =================
```

7. ROM version is confirmed by the content of the display.
8. Unplug the power cable and remove the USB memory.
9. Connect the power cable and confirm that the screen shows “Ready to print”, and then turn the main power switch OFF.

Emergency-UPDATE

If the device is accidentally switched off and upgrading was incomplete, upgrade becomes impossible.
In that case, retry upgrading after recovering the software by following the procedure below.

Preparation

The USB memory must be formatted in FAT or FAT32 in advance.
Extract the main firmware to download from the file.
Rename the file which was extracted from the archive. [DL_CTRL.2LV] to [KM_EMRG.2LV]
Copy the all extracted files to the root of the USB memory.

Procedure

1. Unplug the power cable.
2. Insert the USB memory which contains the firmware into the USB host interface slot.
3. Plug the printer into a power outlet and then turn the power switch on.
4. Rewriting of the PWB software will start for restoration.
   The data and attention LEDs will be blinking.
5. Only the Data LED will be blinking when rewriting is successful.
   * : Only the Attention LED will be blinking when rewriting is failed.
6. Unplug the power cable and then remove the USB memory from the USB host interface slot.

7. Extract the firmware to download from the archive and copy to the root of the formatted USB memory.
   NOTE: Deletes the "ES_SKIP.on" file When it is contained directly under the USB memory.
8. Insert the USB memory in which the firmware was copied into the USB host interface slot.
9. Plug the printer into a power outlet.
10. Perform steps 3 to 9 on the previous page.

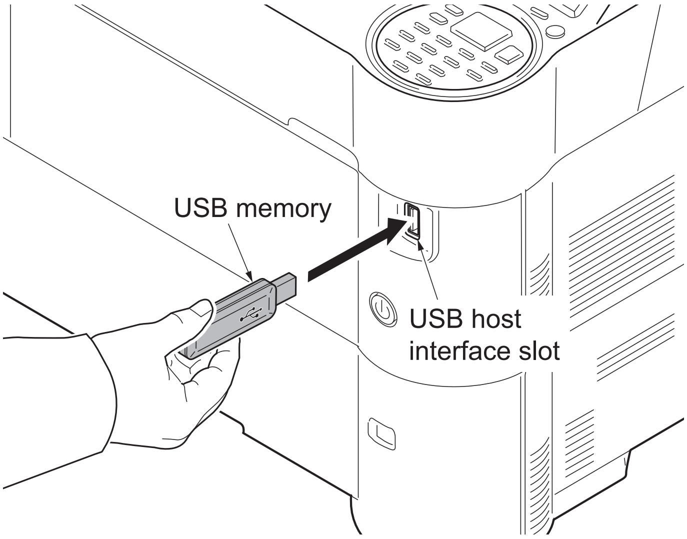


Figure 1-6-2

1-6-2 Remarks on PWB replacement

(1) Engine PWB

NOTE: When replacing the PWB, remove the EEPROM from the PWB and then reattach it to the new PWB.

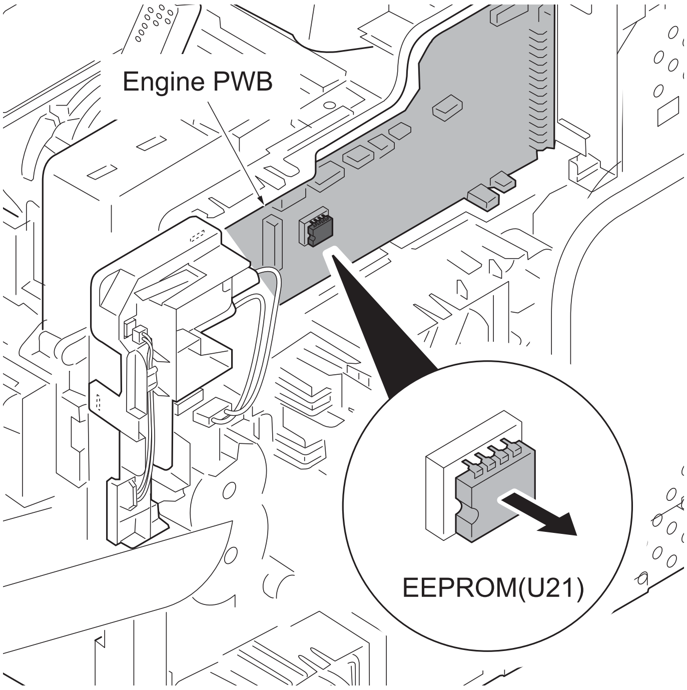

Engine PWB
EEPROM(U21)

Figure 1-6-3

2-1-1 Paper feed/conveying section

Paper feed/conveying section consists of the paper feed unit that feeds paper from the cassette and the MP tray paper feed unit that feeds paper from the MP tray, and the paper conveying section that conveys the fed paper to the transfer/separation section.

(1) Cassette paper feed section

The cassette can contain 500 sheets. The sheet from the cassette is pulled out by rotation of the pickup roller and sent to the paper conveying section by rotation of the paper feed roller. Also the retard roller prevents multiple feeding of paper.

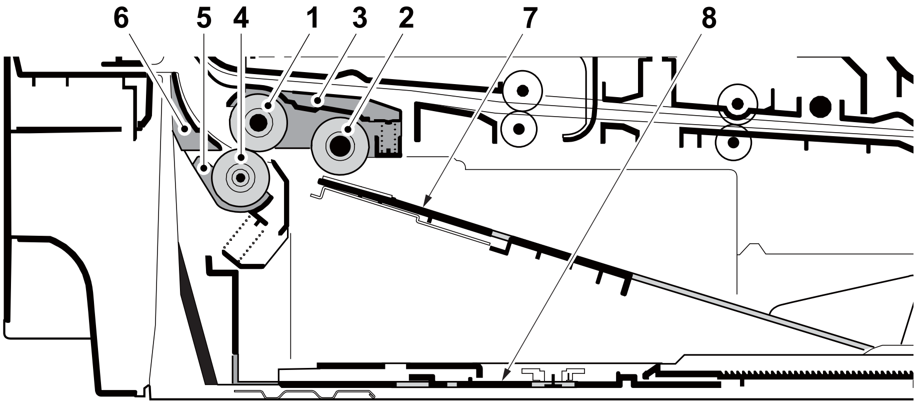


Figure 2-1-1 Cassette paper feed section

1. Paper feed roller
2. Pickup roller
3. Feed holder
4. Retard roller
5. Retard holder
6. Retard guide
7. Bottom plate
8. Cassette base

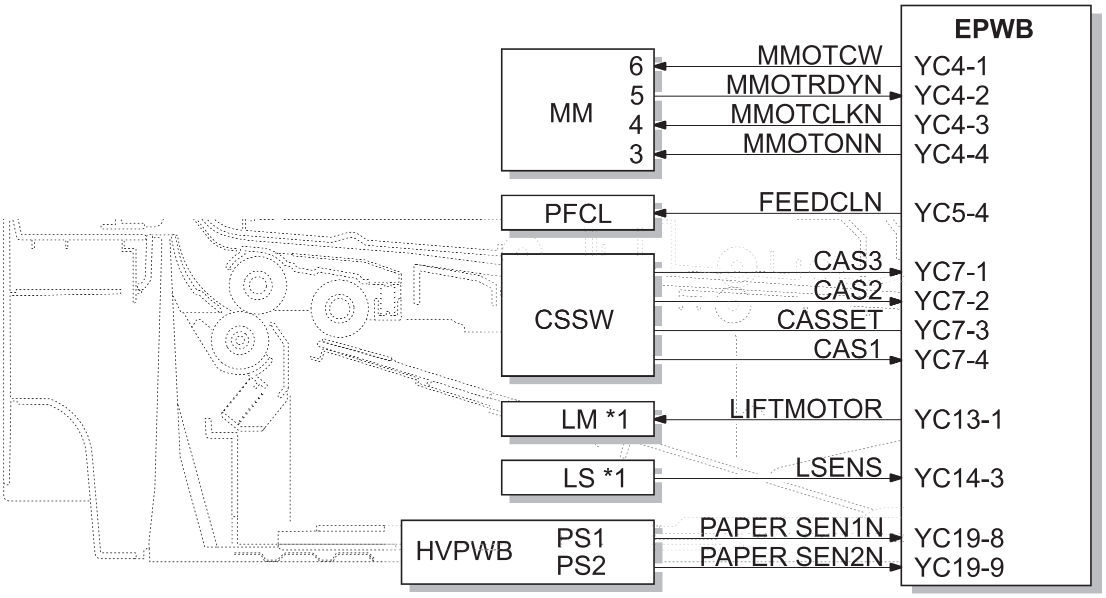

EPWB
MM
6
5
4
3
MMOTCW
MMOTRDYN
MMOTCLKN
MMOTONN
YC4-1
YC4-2
YC4-3
YC4-4
PFCL
FEEDCLN
YC5-4
CSSW
CAS3
CAS2
CASSET
CAS1
YC7-1
YC7-2
YC7-3
YC7-4
LM *1
LIFTMOTOR
YC13-1
LS *1
LSENS
YC14-3
HVPWB
PS1
PS2
PAPER SEN1N
PAPER SEN2N
YC19-8
YC19-9

Figure 2-1-2 Cassette paper feed section block diagram

*1: 60/50/45 ppm model only

(2) MP tray paper feed section

The MP tray can contain 100 sheets. Feeding from the MP tray is performed by the rotation of the MP paper feed roller. Also, function of the MP separation pad prevents paper from multiple feeding.

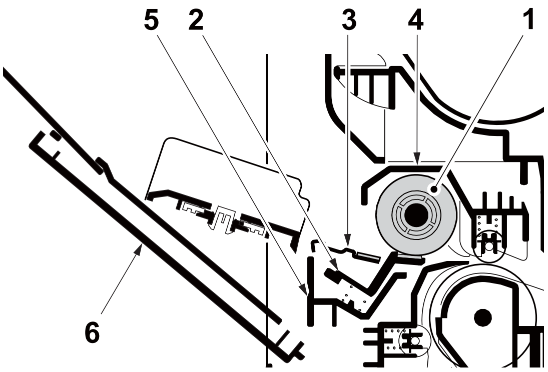


Figure 2-1-3 MP tray paper feed section

1. MP paper feed roller
2. MP separation pad
3. MP bottom plate
4. MP frame
5. MP base
6. MP (Multi purpose)tray

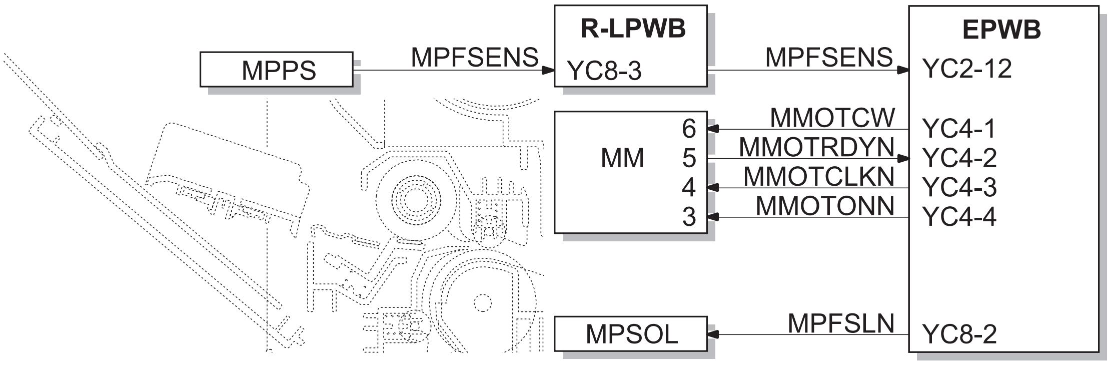

MPPS
MPFSENS
R-LPWB
YC8-3
MPFSENS
EPWB
YC2-12
MM
6
5
4
3
MMOTCW
MMOTRDYN
MMOTCLKN
MMOTONN
YC4-1
YC4-2
YC4-3
YC4-4
MPSOL
MPFSLN
YC8-2

Figure 2-1-4 MP tray paper feed section block diagram

(3) Conveying section

The conveying section conveys paper to the transfer/separation section as paper feeding from the cassette or MP tray, or as paper refeeding for duplex printing. Paper by feeding is conveyed by the paper feed roller to the position where the registration sensor (RS) is turned on, and then sent to the transfer/separation section by the upper registration roller and lower registration roller.

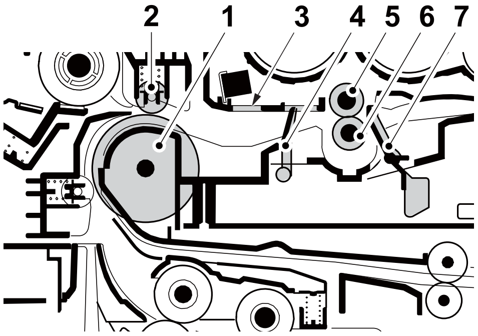


Figure 2-1-5 Conveying section

1. Middle feed roller
2. Feed DU pulley
3. Upper registration guide
4. Actuator
   (Registration sensor 1 (RS1)) *1
5. Upper registration roller
6. Lower registration roller
7. Actuator
   (Registration sensor 3 (RS3)) *2

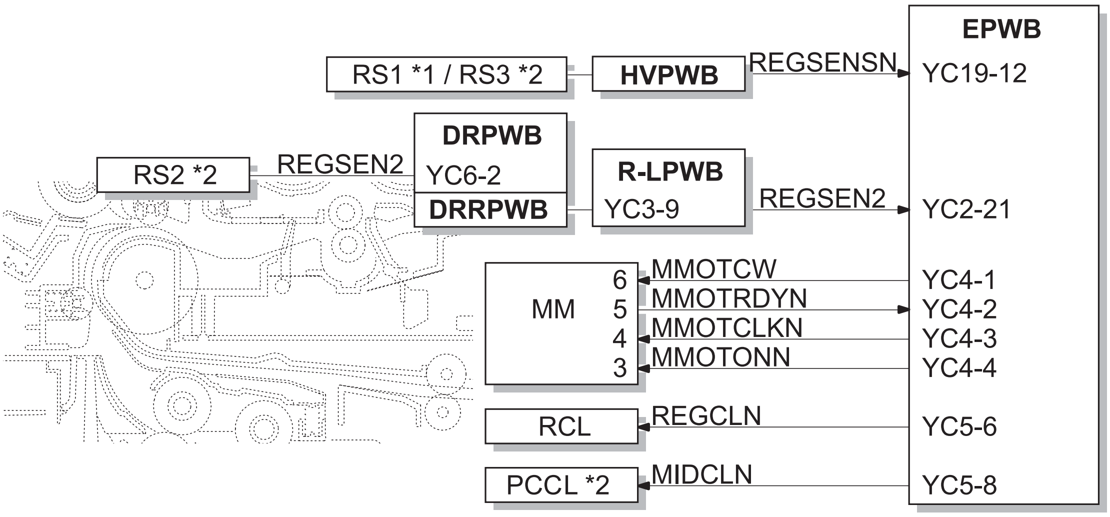

EPWB
RS1 *1 / RS3 *2
HVPWB
REGSENSN
YC19-12
DRPWB
RS2 *2
REGSEN2
YC6-2
DRRPWB
R-LPWB
YC3-9
REGSEN2
YC2-21
MM
6
5
4
3
MMOTCW
MMOTRDYN
MMOTCLKN
MMOTONN
YC4-1
YC4-2
YC4-3
YC4-4
RCL
REGCLN
YC5-6
PCCL *2
MIDCLN
YC5-8

Figure 2-1-6 Paper conveying section block diagram

*1: 40ppm model only
*2: 60/50/45 ppm model only

2-1-2 Drum section

The drum section consists of the drum, the charger roller unit, and the cleaning unit, and the drum surface is uniformly charged in preparation for formation of residual image by laser beam.

(1) Charger roller unit

The drum surface is uniformly charged
by contacting the roller which gave the electric charge and was charged on the drum surface, and rotating it.

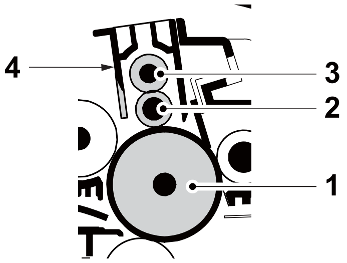


Figure 2-1-7 Charger roller unit

1. Drum	3. Charger cleaning roller
2. Charger roller	4. Charger case

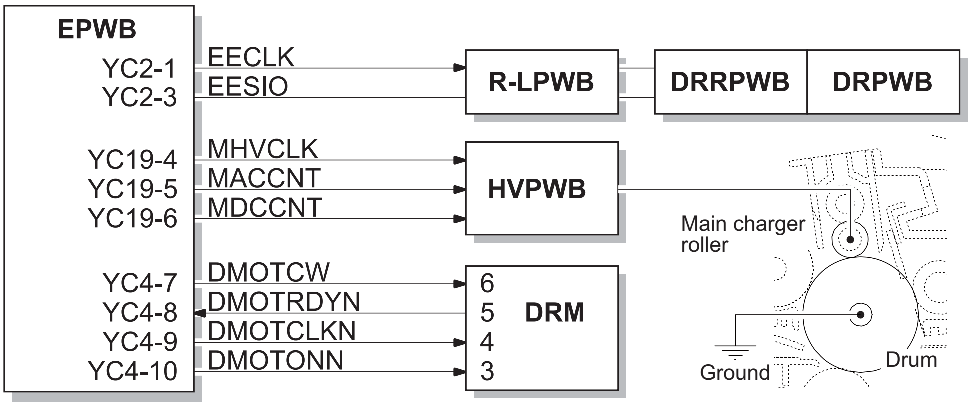

EPWB
YC2-1
YC2-3
YC19-4
YC19-5
YC19-6
YC4-7
YC4-8
YC4-9
YC4-10
EECLK
EESIO
MHVCLK
MACCNT
MDCCNT
DMOTCW
DMOTRDYN
DMOTCLKN
DMOTONN
R-LPWB
DRRPWB
DRPWB
HVPWB
6
5
4
3
DRM
Main charger roller
Ground
Drum

Figure 2-1-8 Charger roller unit

(2) Cleaning unit

After transfer is complete, toner remaining on the drum surface is chipped off with the cleaning blade and is collected to the waste toner box with the drum screw. The cleaning lamp (CL) consists of LEDs and removes residual charge on the drum before main charging.

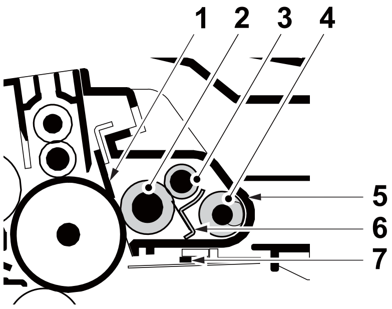


Figure 2-1-9 Cleaning unit

1. Cleaning blade
2. Cleaning roller
3. Control roller
4. Sweep roller
5. Drum frame
6. Scraper
7. Cleaning lamp (CL)

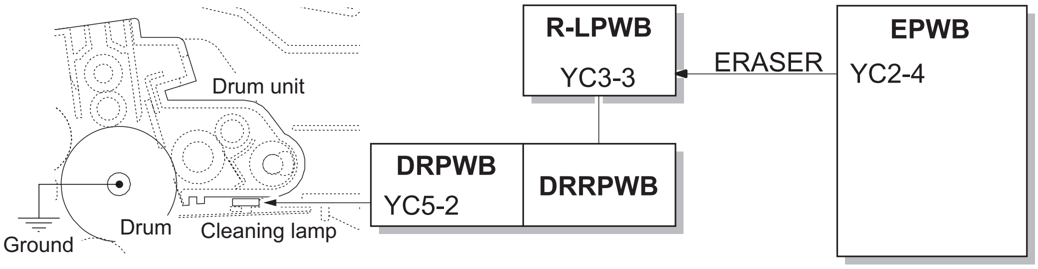

R-LPWB
YC3-3
ERASER
EPWB
YC2-4
Drum unit
DRPWB
YC5-2
DRRPWB
Ground
Drum
Cleaning lamp

Figure 2-1-10 Cleaning unit block diagram

2-1-3 Developer section

The developer unit consists of the developer roller that forms the magnetic brush, the developer blade and the developer screws that agitate the toner.Also, the toner sensor (TS) checks whether or not toner remains in the developer unit.

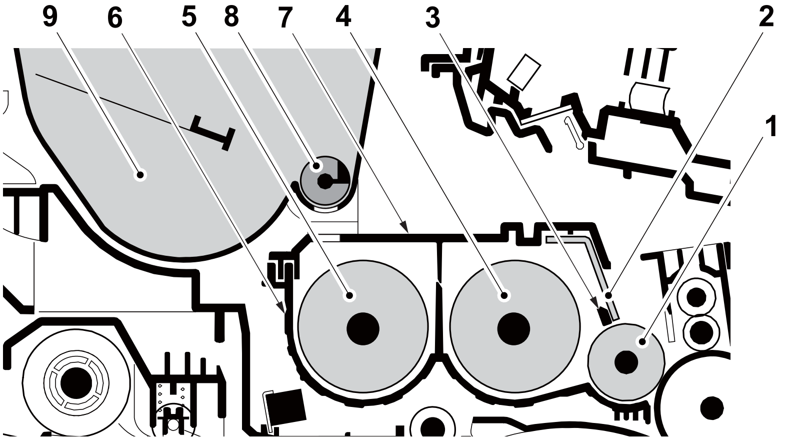


Figure 2-1-11 Developer section

1. Developer roller
2. Developer blade
3. Magnet blade
4. Developer screw A
5. Developer screw B
6. Developer case
7. Upper developer cover
8. Toner supply roller
9. Toner container

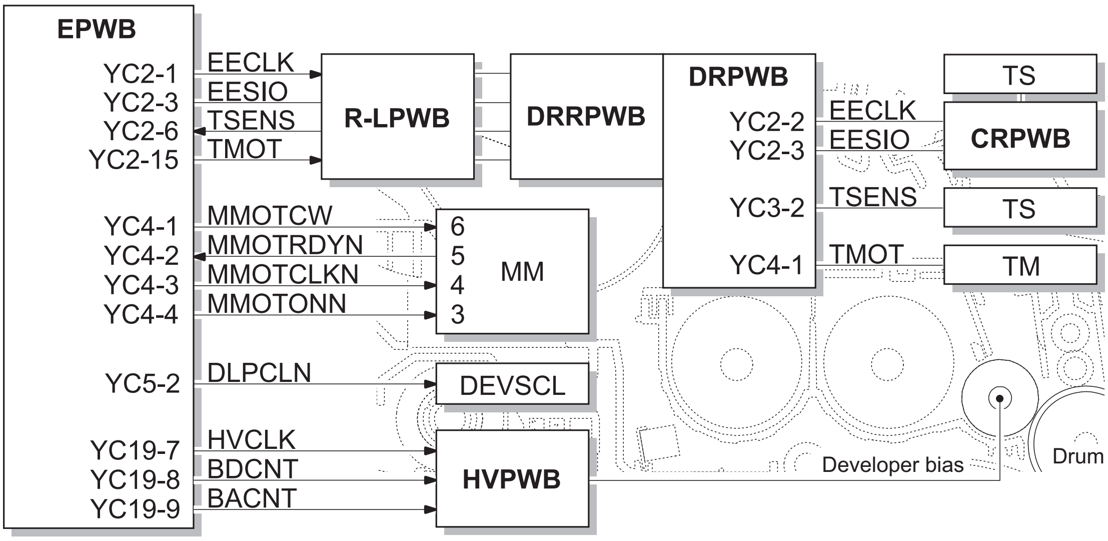

EPWB
YC2-1
YC2-3
YC2-6
YC2-15
EECLK
EESIO
TSENS
TMOT
R-LPWB
DRRPWB
DRPWB
YC2-2
YC2-3
EECLK
EESIO
TS
CRPWB
YC3-2
TSENS
TS
YC4-1
TMOT
TM
YC4-1
YC4-2
YC4-3
YC4-4
MMOTCW
MMOTRDYN
MMOTCLKN
MMOTONN
6
5
4
3
MM
YC5-2
DLPCLN
DEVSCL
YC19-7
YC19-8
YC19-9
HVCLK
BDCNT
BACNT
HVPWB
Developer bias
Drum

Figure 2-1-12 Developer section block diagram

2-1-4 Optical section

(1) Laser scanner section

The charged surface of the drum is then scanned by the laser beam from the laser scanner unit. The laser beam is dispersed as the polygon motor (PM) revolves to reflect the laser beam over the drum. Various lenses and mirror are housed in the laser scanner unit, adjust the diameter of the laser beam, and focalize it at the drum surface.

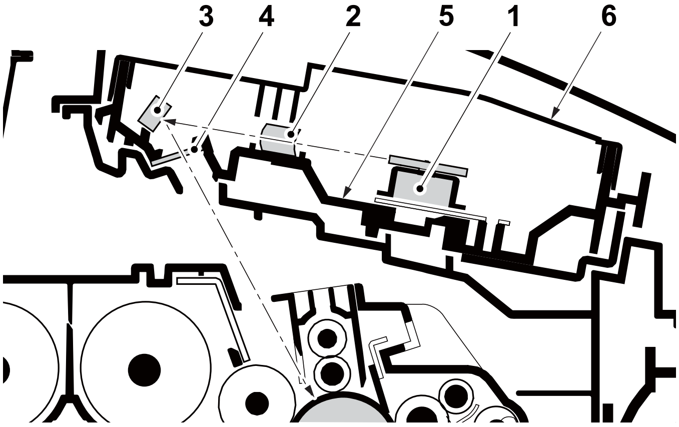


Figure 2-1-13 Laser scanner unit (LSU)

1. Polygon motor (PM)	4. LSU dust shield glass
2. fθ main lens	5. LSU base
3. Direction change mirrer	6. LSU cover

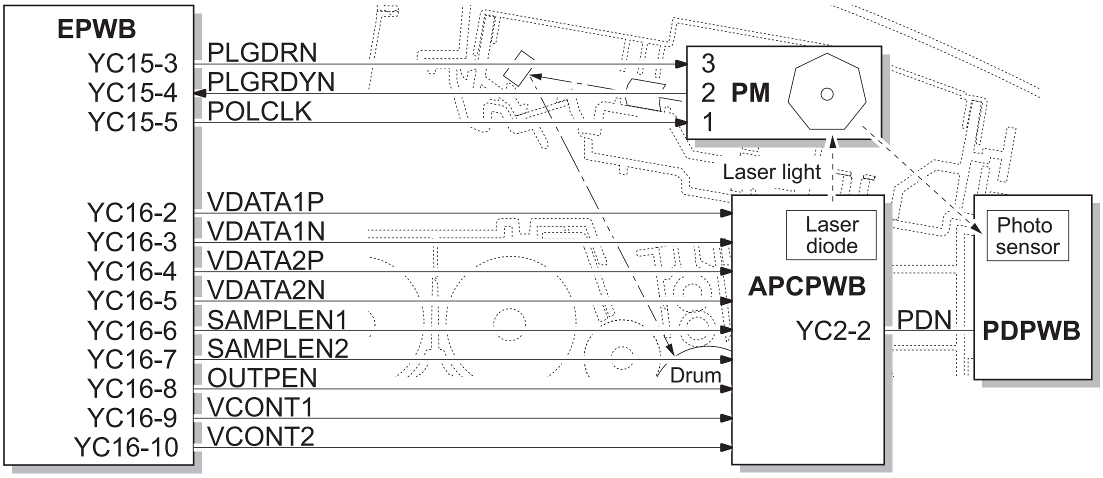

EPWB
YC15-3
YC15-4
YC15-5
YC16-2
YC16-3
YC16-4
YC16-5
YC16-6
YC16-7
YC16-8
YC16-9
YC16-10
PLGDRN
PLGRDYN
POLCLK
VDATA1P
VDATA1N
VDATA2P
VDATA2N
SAMPLEN1
SAMPLEN2
OUTPEN
VCONT1
VCONT2
3
2
1
PM
Laser light
Laser diode
APCPWB
YC2-2
PDN
Photo sensor
PDPWB
Drum

Figure 2-1-14 Laser scanner unit block diagram

2-1-5 Transfer/Separation section

The transfer and separation section consists mainly of the transfer roller and separation electrode.
A high voltage generated by the high voltage PWB (HVPWB) is applied to the transfer roller for transfer charging.
Paper after transfer is separated from the drum by applying separation charging that is output from the high voltage PWB (HVPWB) to the separation electrode.

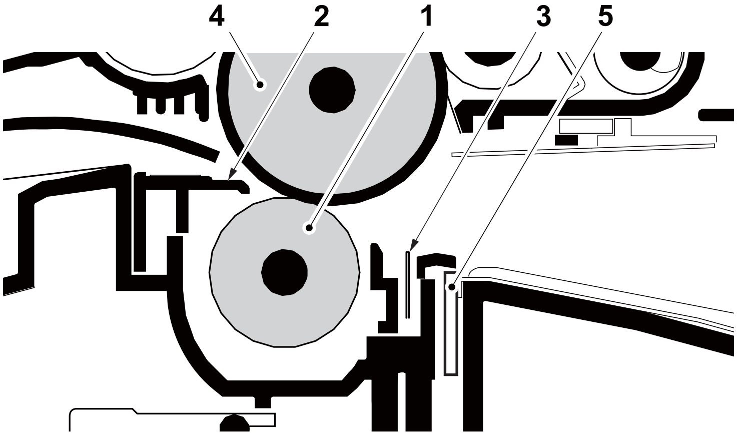


Figure 2-1-15 Transfer/Separation section

1. Transfer roller	4. Drum
2. Paper chute guide	5. Drum heater *1
3. Separation needle	

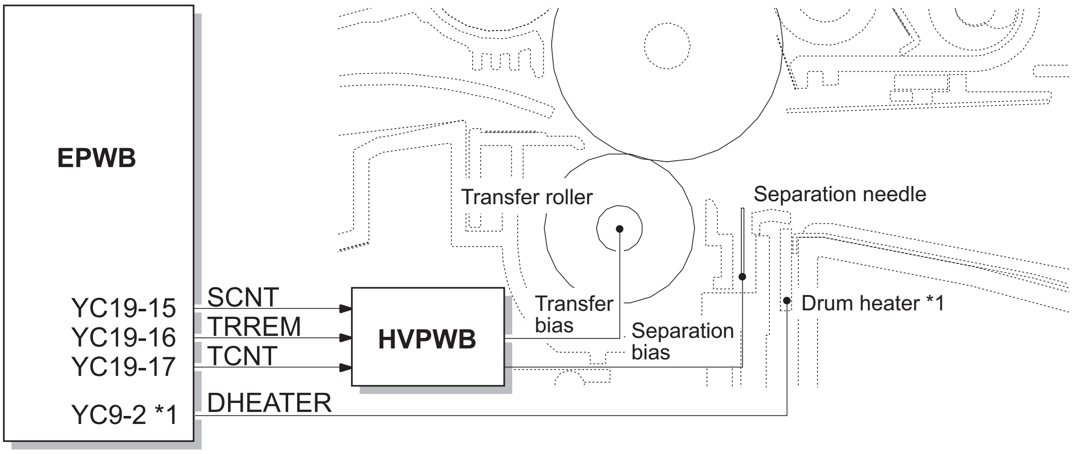

EPWB
YC19-15
YC19-16
YC19-17
YC9-2 *1
SCNT
TRREM
TCNT
DHEATER
HVPWB
Transfer roller
Separation needle
Transfer bias
Separation bias
Drum heater *1

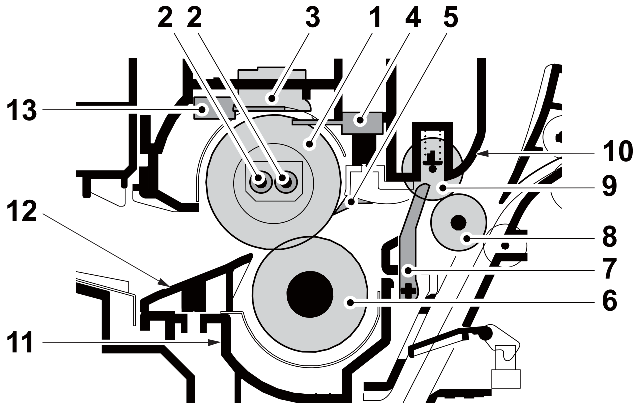
Figure 2-1-16 Transfer/Separation section block diagram

*1: 110V only

2-1-6 Fuser section

The paper sent from the transfer/separation section is interleaved between the heat roller and the press roller. The heat roller is heated by the fuser heater (FUH), and the toner is fused by heat and pressure and fixed onto the paper because the press roller is pressed by the fuser press spring. The surface temperature of heat roller is detected by the fuser thermistor (FUTH1,2) and controlled by the engine PWB (EPWB). If the fuser section shows extremely high temperature, the power line will be shut off and the fuser heater (FUH) is forced to turn off.

(60/50/45 ppm model)



(40 ppm model)

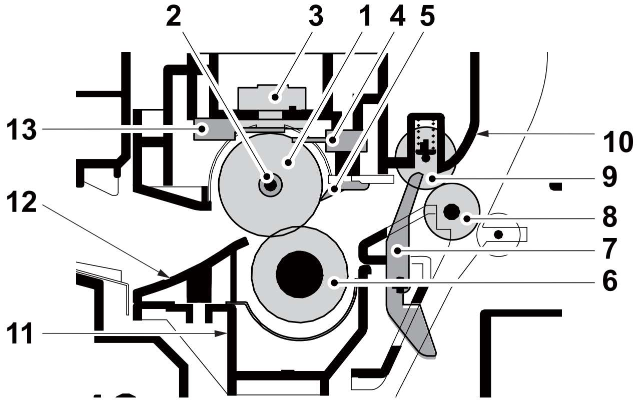
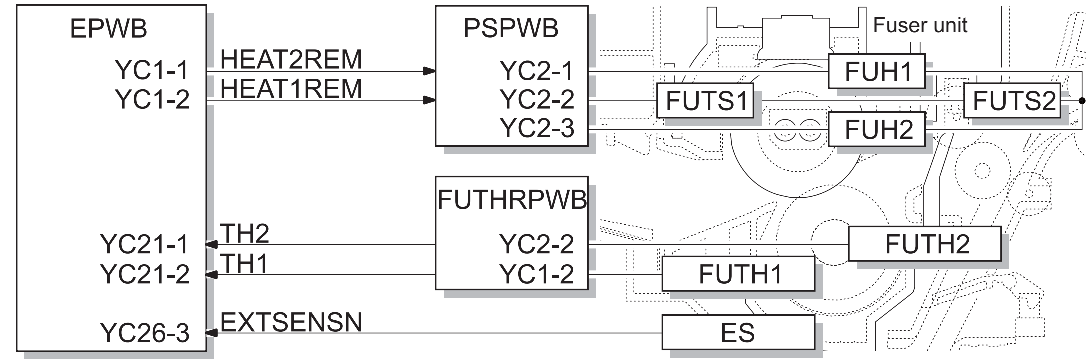


Figure 2-1-17 Fuser section

1. Heat roller	8. Fuser eject roller
2. Fuser heater (FUH)	9. Fuser eject pulley
3. Fuser thermostat (FUTS)	10. Upper fuser frame
4. Fuser thermistor (FUTH1)	11. Lower Fuser frame
5. Separators	12. Pre fuser guide
6. Press roller	13. Fuser thermistor (FUTH2)
7. Actuater (Eject sensor (ES))	

(60/50/45 ppm model)


EPWB
YC1-1
YC1-2
HEAT2REM
HEAT1REM
PSPWB
YC2-1
YC2-2
YC2-3
Fuser unit
FUH1
FUTS1
FUTS2
FUH2
FUTHRPWB
YC21-1
YC21-2
TH2
TH1
YC2-2
YC1-2
FUTH2
FUTH1
YC26-3
EXTSENSN
ES

(40 ppm model)

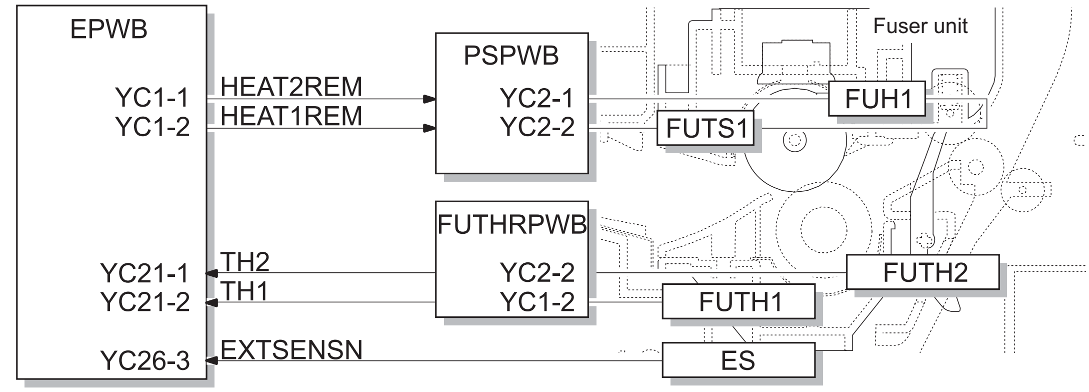
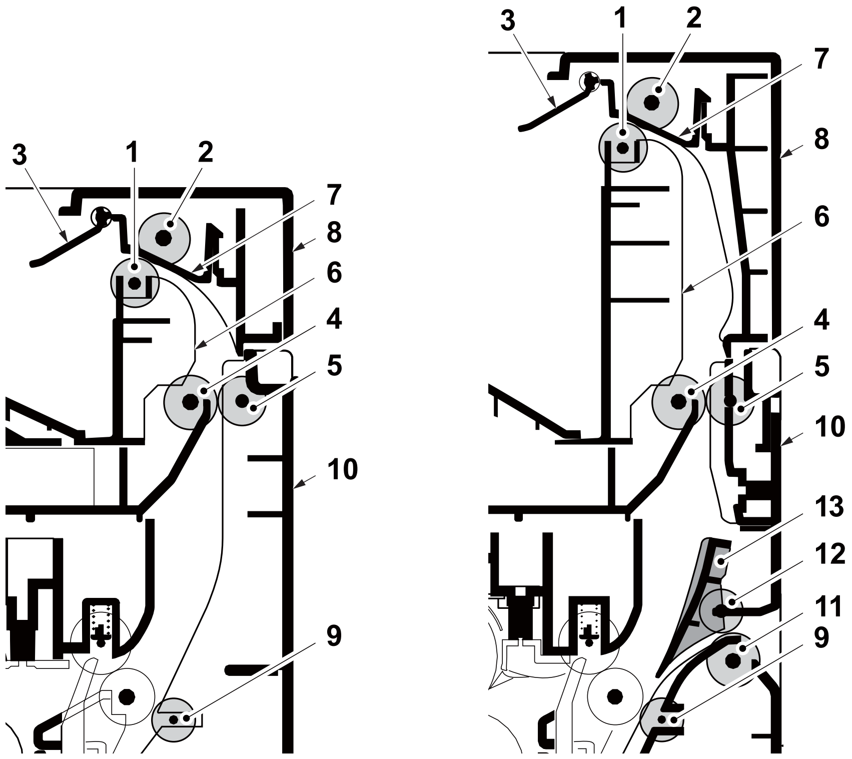

EPWB
Fuser unit
PSPWB
YC1-1
YC1-2
HEAT2REM
HEAT1REM
YC2-1
YC2-2
FUH1
FUTS1
FUTHRPWB
YC21-1
YC21-2
TH2
TH1
YC2-2
YC1-2
FUTH2
FUTH1
YC26-3
EXTSENSN
ES

Figure 2-1-18 Fuser section block diagram

2-1-7 Eject/Feedshift section

The paper eject/feedshift section consists of the conveying path which sends the paper that has passed the fuser section to the facedown tray, the faceup tray (60/50/45 ppm model only) or the duplex conveying section.



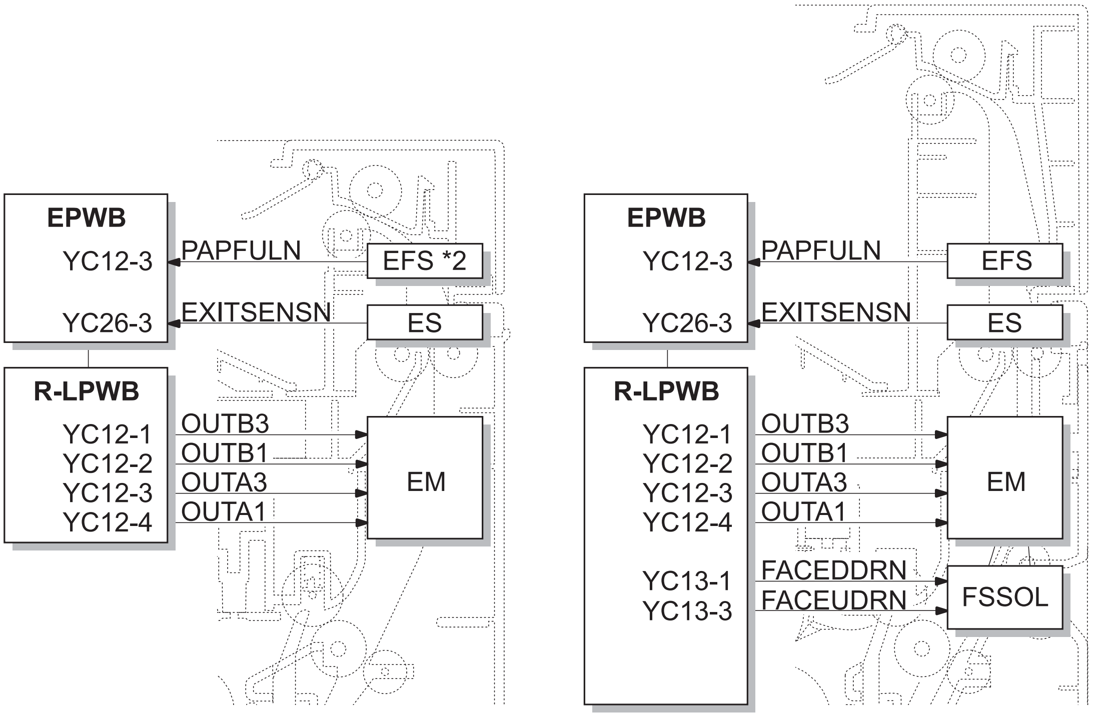
(40 ppm model)

(60/50/45 ppm model)

Figure 2-1-19 Eject/Feedshift section

1. Upper eject roller
2. Upper eject pulley
3. Actuator
   (Eject full sensor (EFS)) *2
4. Lower eject roller
5. Lower eject pulley
6. Vertical guide
7. Paper exit guide
8. Top cover
9. DU feed pulley
10. Rear cover
11. Faceup roller *1
12. Faceup pulley *1
13. Feedshift guide *1

*1: 60/50/45 ppm model only
*2: Except 40 ppm (without Network) model


EPWB
YC12-3
YC26-3
PAPFULN
EXITSENSN
EFS *2
ES
R-LPWB
YC12-1
YC12-2
YC12-3
YC12-4
OUTB3
OUTB1
OUTA3
OUTA1
EM
EPWB
YC12-3
YC26-3
PAPFULN
EXITSENSN
EFS
ES
R-LPWB
YC12-1
YC12-2
YC12-3
YC12-4
YC13-1
YC13-3
OUTB3
OUTB1
OUTA3
OUTA1
FACEDDRN
FACEUDRN
EM
FSSOL

(40 ppm model)

(60/50/45 ppm model)

Figure 2-1-20 Eject/Feed shift section block diagram

*2: Except 40 ppm (without Network) model

2-1-8 Duplex conveying section

The duplex conveying section consists of conveying path which sends the paper sent from the eject/feedshift section to the paper feed/conveying section when duplex printing.

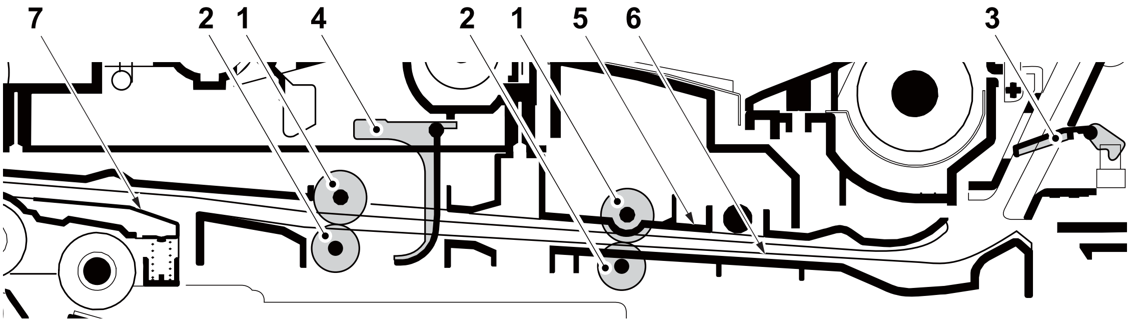


Figure 2-1-21 Duplex conveying section

1. DU conveying roller
2. DU conveying pulley
3. Actuater
   (Duplex sensor 1 (DUS1)) *1
4. Actuater
   (Duplex sensor 2 (DUS2))
5. DU base
6. DU lower guide
7. Upper feed guide

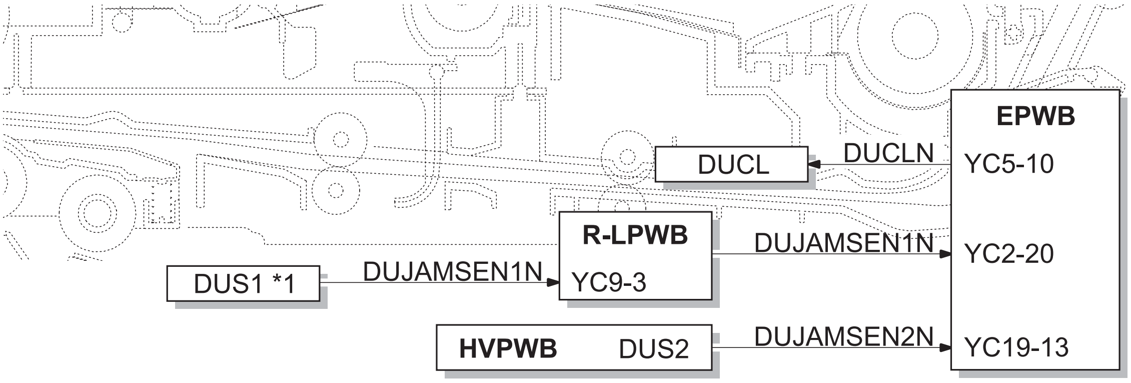

EPWB
DUCL
DUCLN
YC5-10
R-LPWB
DUJAMSEN1N
YC2-20
DUS1 *1
DUJAMSEN1N
YC9-3
HVPWB
DUS2
DUJAMSEN2N
YC19-13

Figure 2-1-22 Duplex conveying section block diagram

*1: 60/50/45 ppm model only

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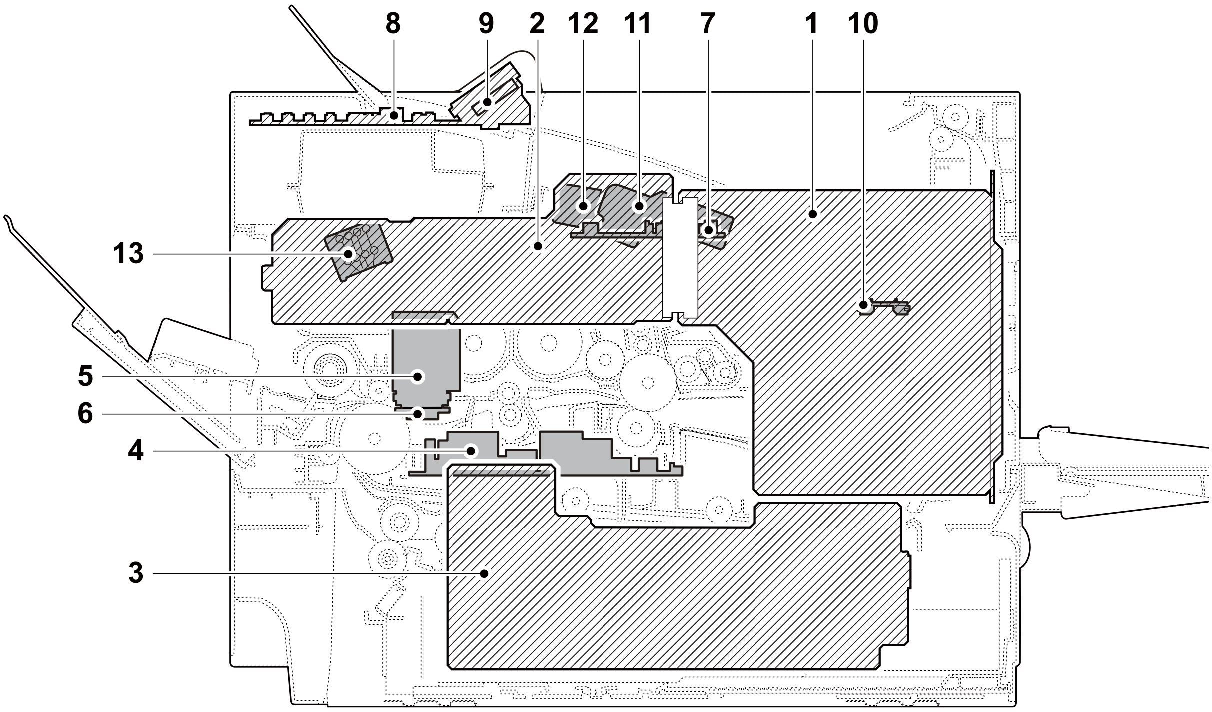
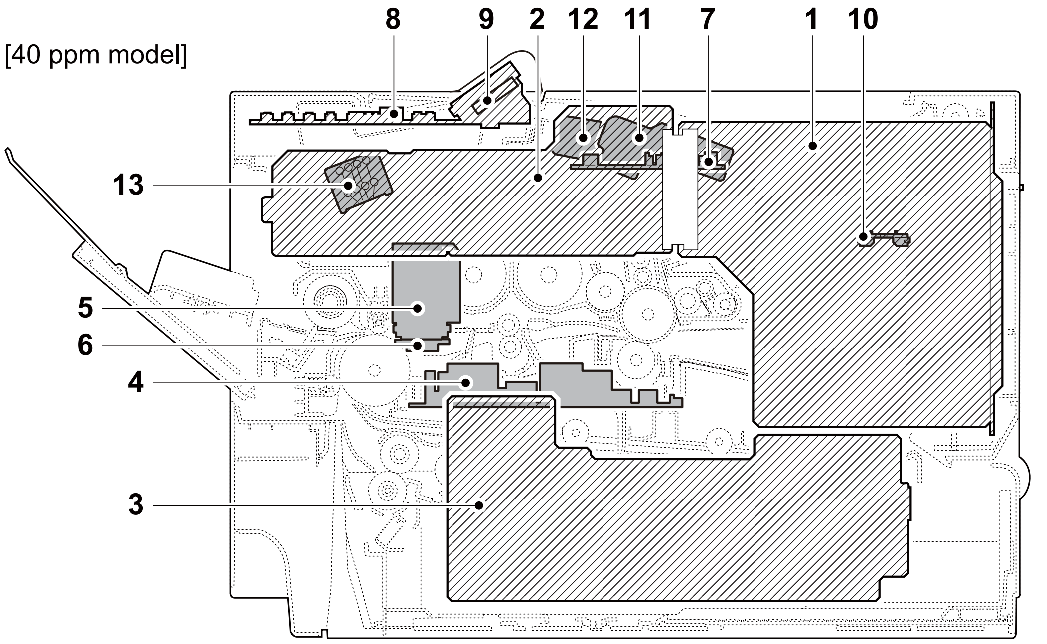
2-2-1 Electrical parts layout

(1) PWBs

[60/50/45 ppm model]


8
9
2
12
11
7
1
10
13
5
6
4
3

[40 ppm model]


8
9
2
12
11
7
1
10
13
5
6
4
3

▨ Machine front ■ Machine inside

Figure 2-2-1 PWBs

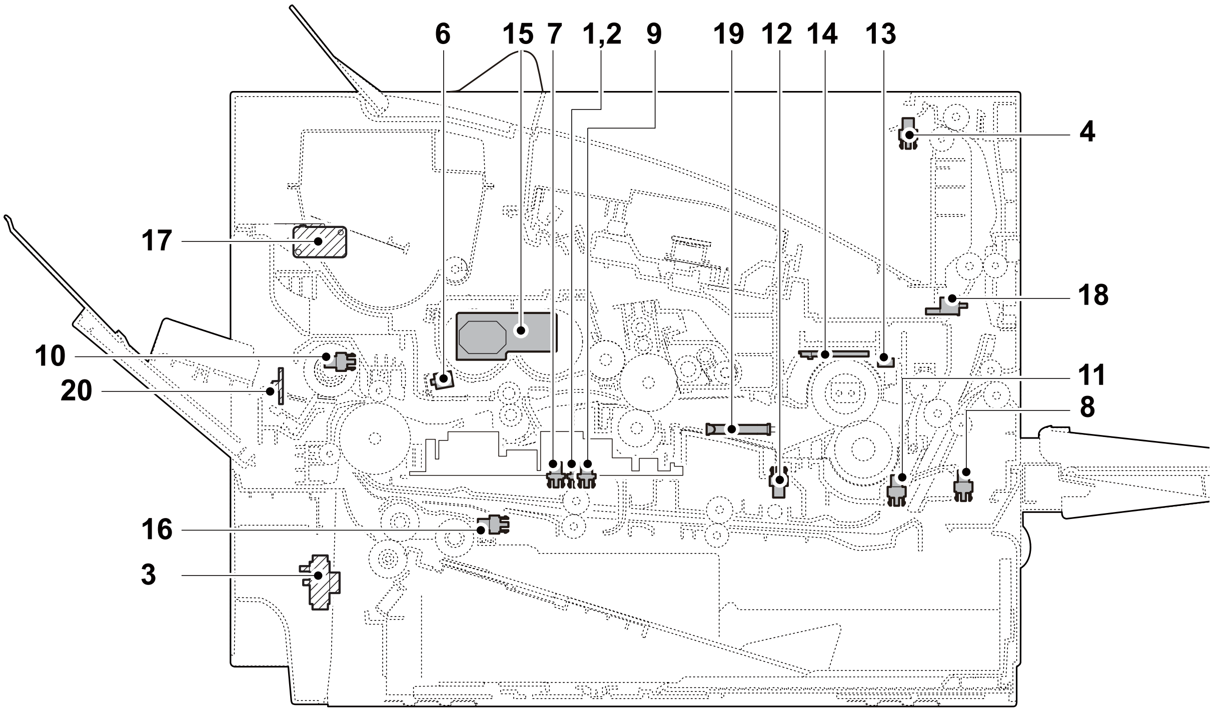
1. Main PWB (MPWB)	Controls the software such as the print data processing and provides the interface with computers.
2. Engine PWB (EPWB)	Controls printer hardware such as high voltage/bias output control, paper conveying system control, and fuser temperature control, etc.
3. Power source PWB (PSPWB)	After full-wave rectification of AC power source input, switching for converting to 24 V DC for output. Controls the fuser heater.
4. High voltage PWB (HVPWB)	Generates main charging, developing bias, transfer bias.
5. Drum PWB (DRPWB)	Relays wirings from electrical components on the drum unit. Drum individual information in EEPROM storage.
6. Drum relay PWB (DRRPWB)	Consists of wiring relay circuit between engine PWB and the drum unit.
7. Relay-L PWB (R-LPWB)	Consists of wiring relay circuit between engine PWB and drum connect PWB.
8. Operation PWB (OPPWB-M)	Consists the LCD, LED indicators and key switches.
9. Backlight PWB (BLPWB)	LCD lighting.
10. Fuser thermistor relay PWB (FUTHRPWB)	Consists of wiring relay circuit between engine PWB ,fuser thermistors and cooling fans.
11. APC PWB (APCPWB)	Generates and controls the laser beam.
12. PD PWB (PDPWB)	Controls horizontal synchronizing timing of laser beam.
13. Container PWB (CPWB)	Reads the container information.

List of correspondences of PWB names

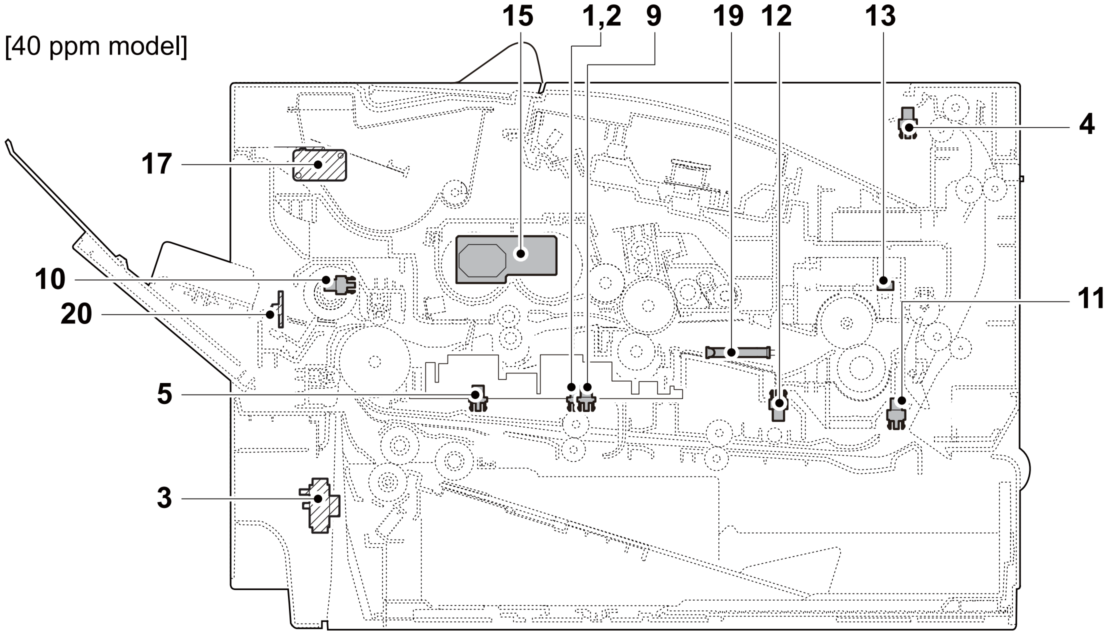
No.	Name used in service manual	Name used in parts list
1	Main PWB (MPWB)	PARTS PWB ASSY MAIN SP
2	Engine PWB (EPWB)	PARTS PWB ASSY ENGINE SP
3	Power source PWB (PSPWB)	PARTS SWITCHING REGULATOR 120V SP PARTS SWITCHING REGULATOR 230V SP
4	High voltage PWB (HVPWB)	PARTS HIGH VOLTAGE UNIT SP
5	Drum PWB (DRPWB)	P.W. BOARD ASSY DRUM
6	Drum connect PWB (DRRPWB)	P.W. BOARD ASSY DRUM CONNECT
7	Relay-L PWB (R-LPWB)	P.W. BOARD ASSY CONNCT-L
8	Operation PWB (OPPWB)	PARTS PWB ASSY PANEL SP
9	Backlight PWB (BLPWB)	
10	Fuser thermistor relay PWB (FUTHRPWB)	P.W. BOARD ASSY TH CONNECT
11	APC PWB (APCPWB)	P.W. BOARD ASSY APC
12	PD PWB (PDPWB)	P.W. BOARD ASSY PD
13	Container PWB (CPWB)	P.W. BOARD ASSY CONTAINER

(2) Switches and sensors

[60/50/45 ppm model]


6
15
7
1,2
9
19
12
14
13
4
17
18
10
20
11
8
16
3

[40 ppm model]


15
1,2
9
19
12
13
4
17
10
20
11
5
3

▨ Machine front ■ Machine inside

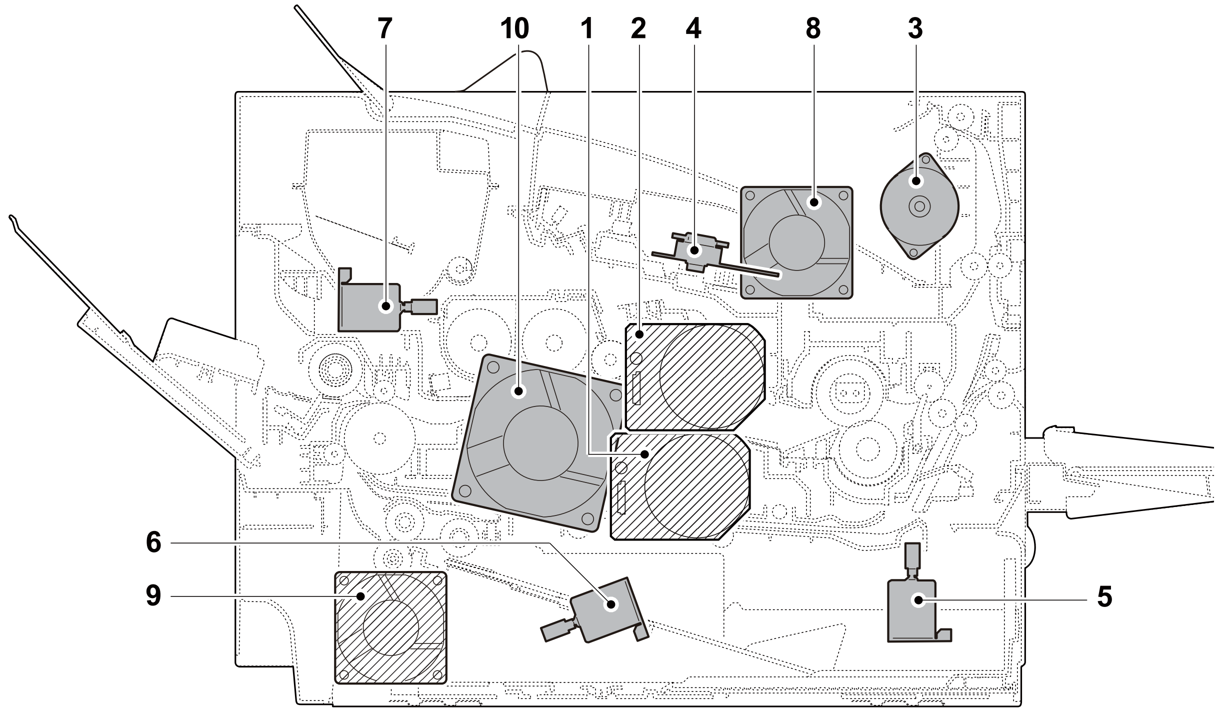
Figure 2-2-2 Switches and sensors

1. Paper sensor 1 (PS1)	Detects the presence of paper in the cassette.
2. Paper sensor 2 (PS2)	Detects the presence of paper in the cassette.
3. Cassette size switch (CSSW)	Detects the paper size dial setting of the paper setting dial.
4. Eject full sensor (EFS) *3	Detects the paper full in the upper tray (Facedown).
5. Registration sensor 1 (RS1) *2	Controls the secondary paper feed start timing.
6. Registration sensor 2 (RS2) *1	Controls the secondary paper feed start timing.
7. Registration sensor 3 (RS3) *1	Controls the Image data beginning timing.
8. Duplex sensor 1 (DUS1) *1	Detects a paper jam in the duplex section.
9. Duplex sensor 2 (DUS2)	Detects a paper jam in the duplex section.
10. MP paper sensor (MPPS)	Detects the presence of paper on the MP tray.
11. Eject sensor (ES)	Detects a paper misfeed in the fuser or eject section.
12. Fuser pressure release sensor (FURS)	Detects the change state of pressure in fuser unit.
13. Fuser thermistor 1 (FUTH1)	Detects the heat roller temperature at the edge position.
14. Fuser thermistor 2 (FUTH2)	Detects the heat roller temperature at the center position.
15. Toner sensor (TS)	Detects the amount of toner in the developer.
16. Lift sensor (LS) *1	Detects the top limit of the bottom plate.
17. Interlock switch (ILSW)	Shuts off 24 V DC power line when the top cover is opened.
18. Rear cover switch (RECSW) *1	Detects the opening and closing of the rear cover.
19. Waste toner sensor (WTS)	Detects when the waste toner box is full.
20. Power source switch (PSSW)	Change ON/OFF the power supply of a main PWB, an operation PWB, etc.

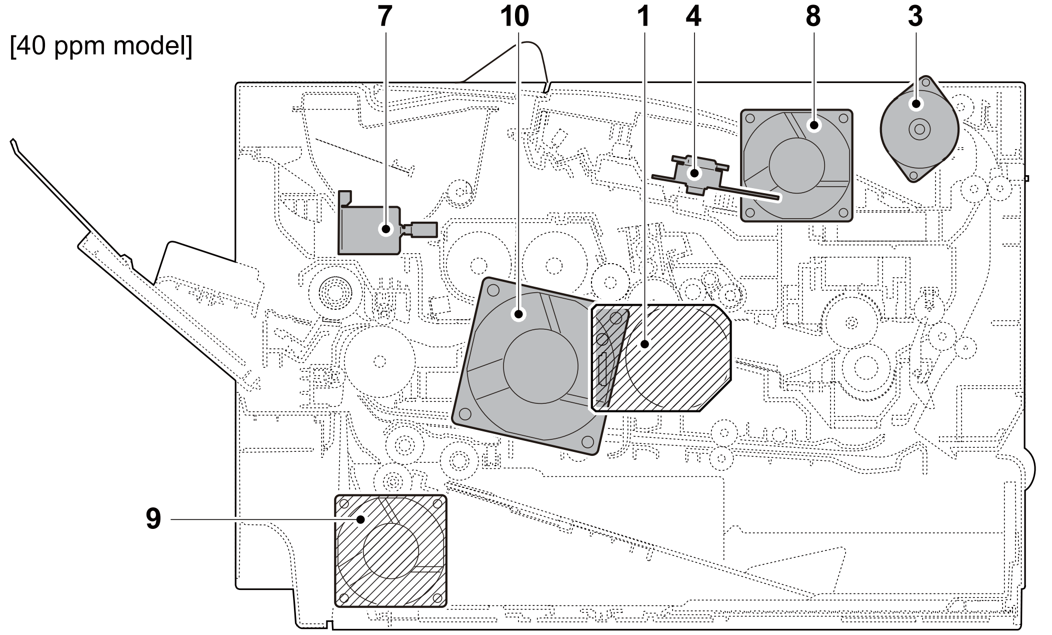
*1: 60/50/45 ppm model only
*2: 40 ppm model only
*3: Except 40 ppm model (without network)

(3) Motors

[60/50/45 ppm model]


7
10
1
2
4
8
3
6
9
5

[40 ppm model]



▨ Machine front ■ Machine inside

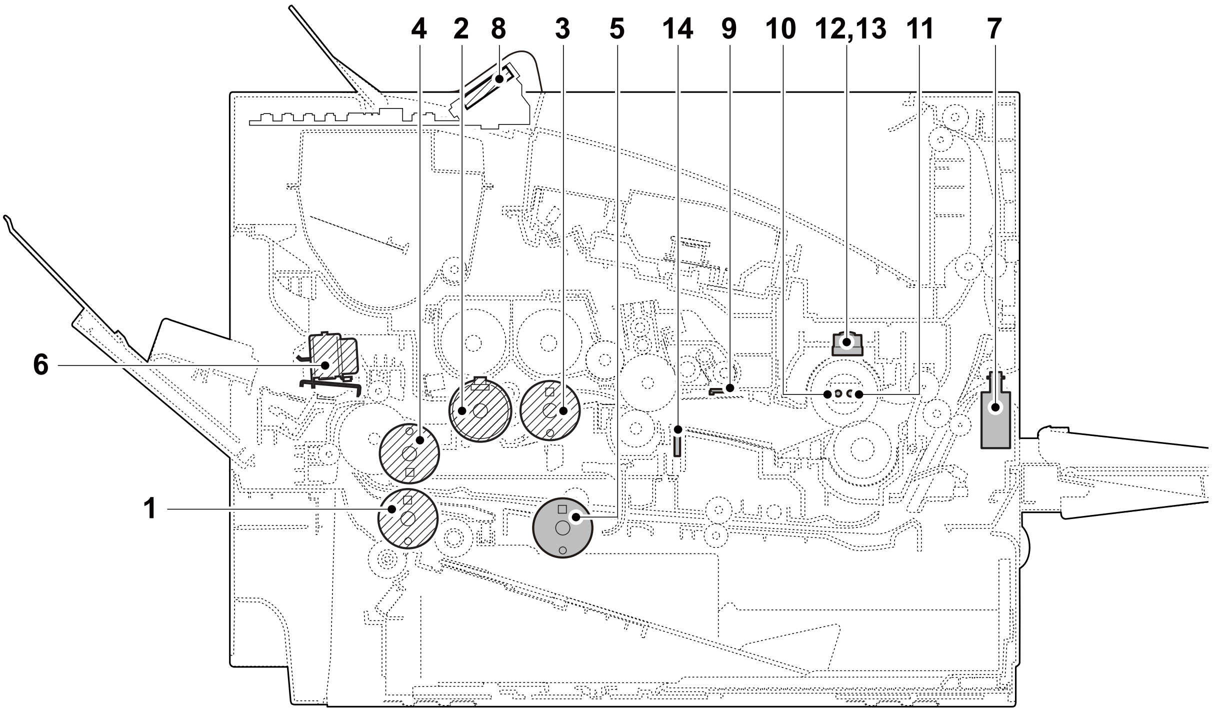
Figure 2-2-3 Motors

1. Main motor (MM).................................... Drives the paper feed section and conveying section.
2. Drum motor (DRM) *1........................... Drives the drum unit and transfer roller.
3. Eject motor (EM)................................... Drives the eject section.
4. Polygon motor (PM)............................. Drives the polygon mirror.
5. Fuser pressure release motor (FUPRM) *1Drives the change mechanism of fixing pressure in fuser unit.
6. Lift motor (LM) *1 .... Operates the bottom plate in the cassette.
7. Toner motor (TM) .... Replenishes toner to the developer unit.
8. LSU fan motor (LSUFM) .... Cools the LSU unit.
9. Power source fan motor (PSFM) .... Cools the power source PWB.
10. Developer fan motor (DEVFM) .... Cools the developer unit.

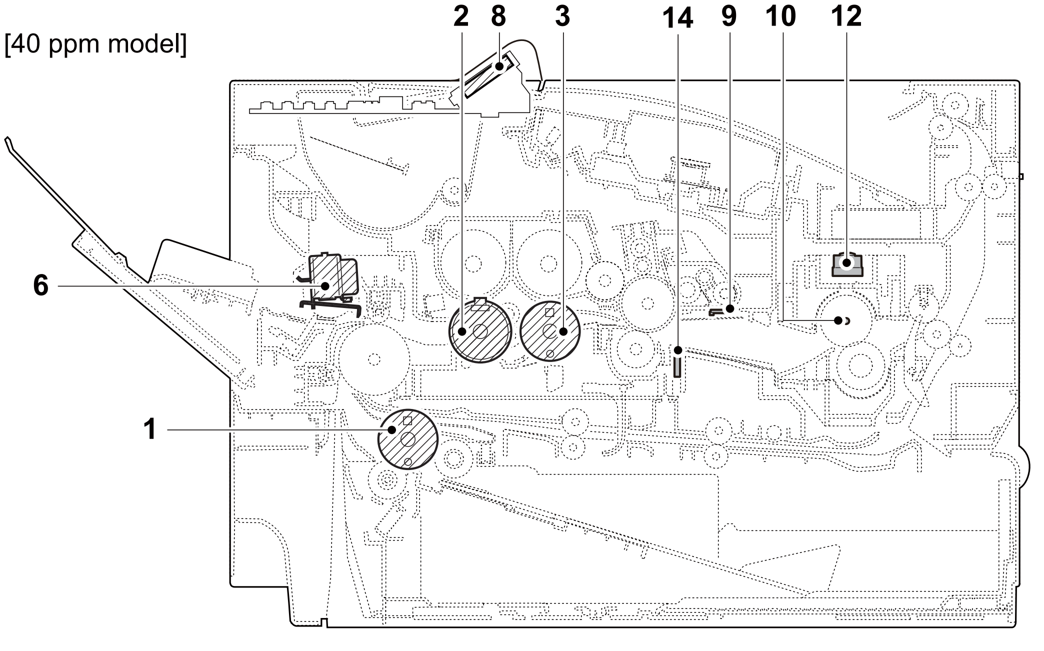
*1: 60/50/45 ppm model only

(4) Clutches and others

[60/50/45 ppm model]


4
2
8
3
5
14
9
10
12,13
11
7
6
1

[40 ppm model]


2
8
3
14
9
10
12
6
1

▨ Machine front ■ Machine inside

Figure 2-2-4 Clutches and others

1. Paper feed clutch (PFCL)	Primary paper feed from cassette.
2. Registration clutch (RCL)	Controls the secondary paper feed.
3. Developer clutch (DEVSCL)	Controls the drive of the developer.
4. Conveying clutch (PCCL) *1	Controls the paper conveying.
5. Duplex clutch (DUCL) *1	Controls the drive of the duplex feed roller.
6. MP solenoid (MPSOL)	Controls the MP bottom plate.
7. Feedshift solenoid (FSSOL) *1	Operates the feedshift guide.
8. LCD (LCD)	LCD display. Displays an operating state.
9. Cleaning lamp (CL)	Eliminates the residual electrostatic charge on the drum.
10. Fuser heater 1 (FUH1)	Heats the heat roller.
11. Fuser heater 2 (FUH2) *1	Heats the heat roller.
12. Fuser thermostat 1 (FUTS1)	Prevents overheating of the heat roller.
13. Fuser thermostat 2 (FUTS2) *1	Prevents overheating of the heat roller.
14. Drum heater (DH) *2	Heats the drum.

*1: 60/50/45 ppm model only
*2: 110V only

2-3-1 Main PWB (MPWB)

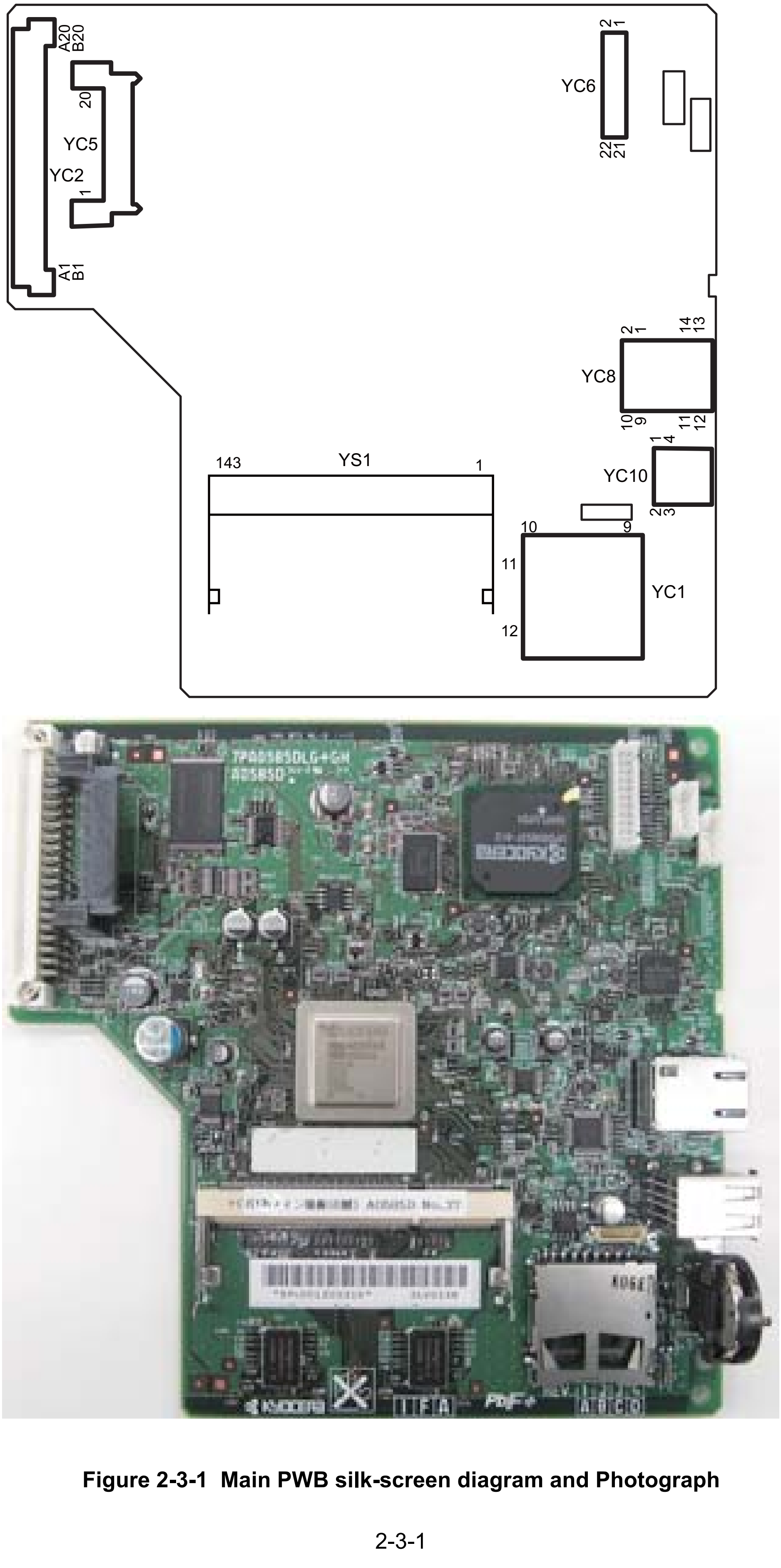

A20
B20
20
YC5
YC2
1
A1
B1
2
1
YC6
22
21
2
1
14
13
YC8
10
9
11
12
1
4
YC10
2
3
143
YS1
1
10
9
11
YC1
12

Figure 2-3-1 Main PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	CD/DAT3	I/O	0/3.3 V DC	control signal
Connected to the SD card I/F	2	CMD	I/O	0/3.3 V DC	control signal
	3	Vss	-	-	Ground
	4	Vdd	-	0/3.3 V DC	control signal
	5	CLK	-	0/3.3 V DC	control signal
	6	Vss	-	-	Ground
	7	DAT0	I/O	0/3.3 V DC(pulse)	Data bus signal
	8	DAT1	I/O	0/3.3 V DC(pulse)	Data bus signal
	9	DAT2	I/O	0/3.3 V DC(pulse)	Data bus signal
	10	CD	I	0/3.3 V DC	control signal
	11	COMMON	-	0/3.3 V DC	control signal
	12	WP	I	0/3.3 V DC	control signal
YC2	A1	E2C_INT	I	0/3.3 V DC	Transmission clock signal
Connected to the engine PWB	B1	C2E_INT	O	0/3.3 V DC	controller interrupt signal
	A2	GND	-	-	Ground
	B2	C2E_OFFRDY	O	0/3.3 V DC	OFF mode sift signal
	A3	GND	-	-	Ground
	B3	VSYNC	I	0/3.3 V DC(pulse)	Sub scanning synchronizing signal
	A4	E2C_SBSY	I	0/3.3 V DC	System busy signal
	B4	E2C_SDIR	I	0/3.3 V DC	Serial communication direction signal
	A5	C2E_SDAT	O	0/3.3 V DC(pulse)	Serial communication data input
	B5	C2E_SCKN	O	0/3.3 V DC(pulse)	Serial communication clock signal
	A6	E2C_IRN	I	0/3.3 V DC	Engine interrupt signal
	B6	E2C_SDAT	I	0/3.3 V DC(pulse)	Serial communication data output
	A7	GND	-	-	Ground
	B7	PLGCLK	O	0/3.3 V DC	PM control signal
	A8	VDATA2N	O	0/3.3 V DC	Video data signal
	B8	VDATA1N	O	0/3.3 V DC	Video data signal
	A9	VDATA2P	O	0/3.3 V DC	Video data signal
	B9	VDATA1P	O	0/3.3 V DC	Video data signal
	A10	GND	-	-	Ground
	B10	PDN	I	0/3.3 V DC(pulse)	Main scanning synchronizing signal
	A11	SAMPLE1	O	0/3.3 V DC	Sample/Hold signal
	B11	SAMPLE2	O	0/3.3 V DC	Sample/Hold signal
	A12	C2P_SDAT	O	0/3.3 V DC	Panel transmitted data signal
	B12	P2C_SDAT	I	0/3.3 V DC	Panel received data sjgnal

Connector	Pin	Signal	I/O	Voltage	Description
YC2	A13	C2P_LCDCON	O	0/3.3 V DC	Panel LCD control signal
Connected to the engine PWB	B13	P2C_PKEY	I	0/3.3 V DC	Panel start signal
	A14	C2P_BUZCON	O	0/3.3 V DC	Panel buzzer control signal
	B14	FUPRST	O	0/3.3 V DC	Panel reset signal
	A15	GND	-	-	Ground
	B15	GND	-	-	Ground
	A16	VBUS	O	5V DC	5 V DC power output to USB
	B16	UDATAP	I/O	-	USB data signal
	A17	GND	-	-	Ground
	B17	UDATAN	I/O	-	USB data signal
	A18	GND	-	-	Ground
	B18	GND	-	-	Ground
	A19	+5V2	I	5 V DC	5 V DC power input from EPWB
	B19	+5V2	I	5 V DC	5 V DC power input from EPWB
	A20	+5V2	I	5 V DC	5 V DC power input from EPWB
	B20	+5V2	I	5 V DC	5 V DC power input from EPWB
YC5	1	VDD5	O	5 V DC	5 V DC power output to eKUIO
Connected to the eKUIO IF	2	GND	-	-	Ground
	3	RESETN	O	0/3.3 V DC	Reset signal
	4	VDD5_CUT	O	0/3.3 V DC	Sleep signal
	5	GND	-	-	Ground
	6	WAKEUP	I	0/3.3 V DC	Wake-up signal
	7	AUDIO	I	0/3.3 V DC	Audio signal
	8	NC	-	-	Not used
	9	NC	-	-	Not used
	10	NC	-	-	Not used
	11	GND	-	-	Ground
	12	NC	-	-	Not used
	13	NC	-	-	Not used
	14	GND	-	-	Ground
	15	NC	-	-	Not used
	16	NC	-	-	Not used
	17	GND	-	-	Ground
	18	USB_DP	I/O	-	USB data signal
	19	USB_DN	I/O	-	USB data signal
	20	VBUS	O	5 V DC	5 V DC power output to eKUIO

Connector	Pin	Signal	I/O	Voltage	Description
YC6	1	+3.3V	O	3.3 V DC	5 V DC power output to OP
Connected to the centro option I/F	2	+5.0V	O	5 V DC	5 V DC power output to OP
	3	P1284DIR	O	0/3.3 V DC	Direction input signal
	4	NACK	O	0/3.3 V DC	Acknowledge input signal
	5	BUSY	O	0/3.3 V DC	Busy input
	6	PERROR	O	0/3.3 V DC	Errer signal
	7	SELECT	O	0/3.3 V DC	Select signal
	8	NFAULT	O	0/3.3 V DC	Errer signal
	9	PDATA1	I/O	-	Data signal
	10	PDATA2	I/O	-	Data signal
	11	PDATA3	I/O	-	Data signal
	12	PDATA4	I/O	-	Data signal
	13	PDATA5	I/O	-	Data signal
	14	PDATA6	I/O	-	Data signal
	15	PDATA7	I/O	-	Data signal
	16	PDATA8	I/O	-	Data signal
	17	NSELECTIN	I	0/3.3 V DC	Select signal
	18	NSTROBE	I	0/3.3 V DC	Output signal
	19	NAUTOFD	I	0/3.3 V DC	AUTO-FEED signal
	20	NINIT	I	0/3.3 V DC	Reset signal
	21	PDETECT	I	0/3.3 V DC	OP detection signal
	22	GND	-	-	Ground
YC8	1	TD1+	I/O	0/3.3 V DC(pulse)	Trancemitted data
Connected to the network I/F	2	TD1-	I/O	0/3.3 V DC(pulse)	Send data
	3	TD2+	I/O	0/3.3 V DC(pulse)	Send data
	4	TD2-	I/O	0/3.3 V DC(pulse)	Send data
	5	CT1	O	3.3 V DC	3.3 V DC power output
	6	CT2	O	3.3 V DC	3.3 V DC power output
	7	TD3+	I/O	0/3.3 V DC(pulse)	Send data
	8	TD3-	I/O	0/3.3 V DC(pulse)	Send data
	9	TD4+	I/O	0/3.3 V DC(pulse)	Send data
	10	TD4-	I/O	0/3.3 V DC(pulse)	Send data
	11	GRLED_A	I	0/3.3 V DC	LED flashing caution signal
	12	GRLED_K	I	0/3.3 V DC	LED flashing caution signal
	13	YWLED_A	I	0/3.3 V DC	LED flashing caution signal
	14	YWLED_K	I	0/3.3 V DC	LED flashing caution signal

Connector	Pin	Signal	I/O	Voltage	Description
YC10	A1	VBUS_A	O	5 V DC	5 V DC power output to USB device
Connected to the USB host I/F USB device I/F	A2	D-_A	I/O	-	USB data signal
	A3	D+_A	I/O	-	USB data signal
	A4	GND_A	-	-	Ground
	B1	VBUS_B	O	5 V DC	5 V DC power output to USB host
	B2	D-_B	I/O	-	USB data signal
	B3	D+_B	I/O	-	USB data signal
	B4	GND_B	-	-	Ground

2-3-2 Engine PWB (EPWB)

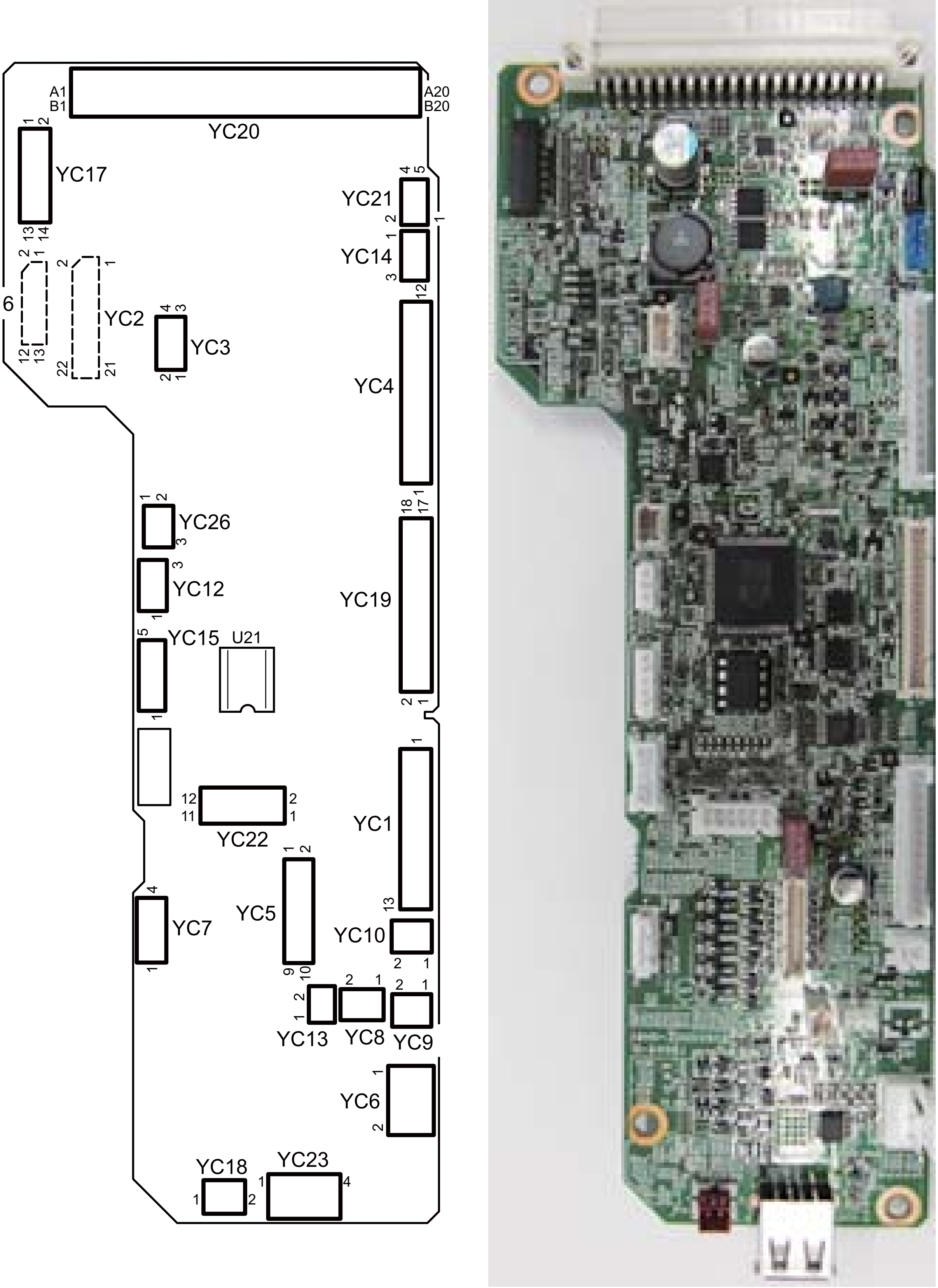

A1
B1
YC20
A20
B20
YC17
1 2
13 14
YC21
4 5
2 1
YC14
1 3
YC16
2 1
12 13
YC2
2 1
22 21
YC3
4 3
2 1
YC4
12
YC26
1 2
3
YC12
3
1
YC19
18 17
2 1
YC15
5
1
U21
12 2
11 1
YC22
YC1
1
13
YC5
1 2
9 10
YC7
4
1
YC10
2 1
YC13
2 1
YC8
2 1
YC9
2 1
YC6
1
2
YC18
1 2
YC23
1 4

Figure 2-3-2 Engine PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1 Connected to the power source PWB *: 60/50/45 ppm model only	1	HEAT2REM	O	0/3.3 V DC	TH2 remote signal
	2	HEAT1REM	O	0/3.3 V DC	TH1 remote signal
	3	ZCROSSN	I	0/3.3 V DC	Zero crossing detection signal
	4	RELAY	O	0/3.3 V DC	Relay driving signal
	5	PSLEEPN	O	0/3.3 V DC	Sleep signal
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	GND	-	-	Ground
	10	+24V1	I	24 V DC	24 V DC power input from PSPWB
	11	+24V1	I	24 V DC	24 V DC power input from PSPWB
	12	+24V1	I	24 V DC	24 V DC power input from PSPWB
	13	+24V1	I	24 V DC	24 V DC power input from PSPWB
YC2 Connected to the relay-L PWB *: 60/50/45 ppm model only	1	EECLK	O	0/3.3 V DC	Clock signal
	2	GND	-	-	Ground
	3	EESIO	I/O	0/3.3 V DC(pulse)	Communication data
	4	ERASER	O	0/3.3 V DC	CL: On/Off
	5	+3.3V6	O	3.3 V DC	3.3 V DC power output to R-LPWB
	6	TSENS	I	Analog	TS output signal
	7	SBMDIR	O	0/3.3 V DC	SBM: On/Off
	8	WTSENS	I	Analog	WTS output signal
	9	SBMENBLN	O	0/3.3 V DC	SBM enable signal
	10	WTLED	O	0/3.3 V DC	LED: On/Off
	11	SBMSTEP	O	0/3.3 V DC(pulse)	SBM clock signal
	12	MEFSENS	I	0/3.3 V DC	MPS: On/Off
	13	SBMMODE	O	0/3.3 V DC	SBM mode signal
	14	+3.3V2	O	3.3 V DC	3.3 V DC power output
	15	TMOT	O	0/3.3 V DC	TM: On/Off
	16	LFANN	O	0/3.3 V DC	CENFM: On/Off
	17	FUDR	O	0/3.3 V DC	FSSOL: On/Off
	18	ENVMOT	O	0/3.3 V DC	FUPRM: On/Off
	19	FDDR	O	0/3.3 V DC	FSSOL: On/Off
	20	DUJAMSEN1N	I	0/3.3 V DC	DUS: On/Off
	21	REGSEN2	I	0/3.3 V DC	RS: On/Off
	22	REARSWN	I	0/3.3 V DC	RCS: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC3	1	+24V4	O	24 V DC	24 V DC power output
Connected to the relay-L PWB	2	GND	-	-	Ground
	3	GND	-	-	Ground
	4	+24V6	O	24 V DC	24 V DC power output
YC4	1	MMOTCW	O	0/5 V DC	MM drive shift signal
Connected to the drum motor and main motor	2	MMOTRDYN	I	0/3.3 V DC	MM ready signal
	3	MMOTCLKN	O	0/5 V DC(pulse)	MM clock signal
	4	MMOTONN	O	0/5 V DC	MM: On/Off
	5	GND	-	-	Ground
*: 60/50/45 ppm model only	6	+24V3	O	24 V DC	24 V DC power output
	7	DMOTCW	O	0/5 V DC	DRM rotation direction
	8	DMOTRDYN	I	0/3.3 V DC	DRM ready signal
	9	DMOTCLKN	O	0/5 V DC(pulse)	DRM clock signal
	10	DMOTONN	O	0/5 V DC	DRM: On/Off
	11	GND	-	-	Ground
	12	+24V3	O	24 V DC	24 V DC power output
YC5	1	+24V3	O	24 V DC	24 V DC power output to DEVCL
Connected to the duplex cltch,mid cltch, registration clutch,paper feed cltch and developer clutch *: 60/50/45 ppm model only	2	DLPCLN	O	0/3.3 V DC	DEVCL: On/Off
	3	+24V3	O	24 V DC	24 V DC power output to PFCL
	4	FEEDCLN	O	0/24 V DC	PFCL: On/Off
	5	+24V3	O	24 V DC	24 V DC power output to RCL
	6	REGCLN	O	0/24 V DC	RCL: On/Off
	7	+24V3	O	24 V DC	24 V DC power output to PCCL
	8	MIDCLN	O	0/24 V DC	PCCL: On/Off
	9	+24V3	O	24 V DC	24 V DC power output to DUCL
	10	DUCLN	O	0/24 V DC	DUCL: On/Off
YC6	1	+24V1	O	24 V DC	24 V DC power output
Connected to the interlock switch	2	+24V2	O	24 V DC	24 V DC power output
YC7	1	CAS3	I	0/24 V DC	CSSW: On/Off
Connected to the cassette size switch	2	CAS2	I	0/3.3 V DC	CSSW: On/Off
	3	CASSET	-	-	CSSW common signal
	4	CAS1	I	0/3.3 V DC	CSSW: On/Off

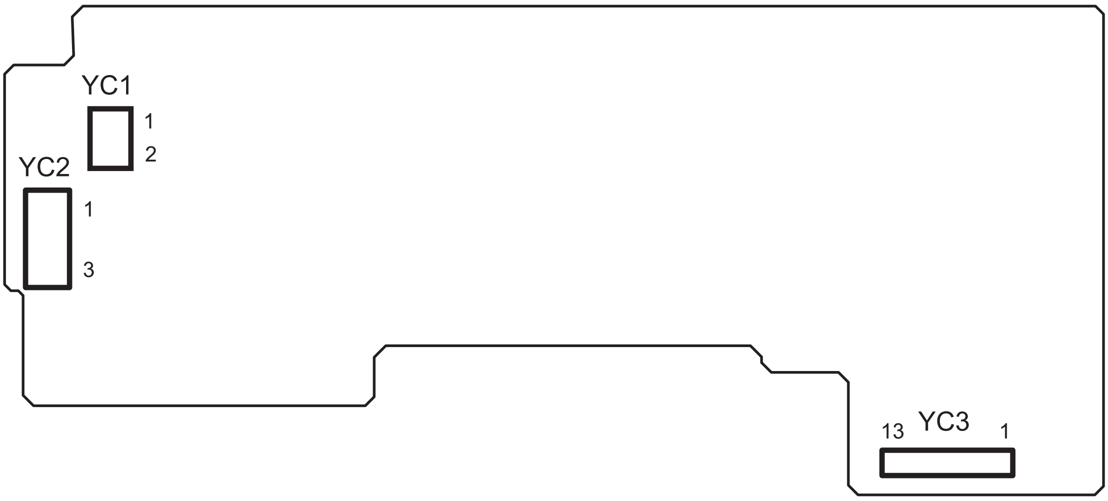
Connector	Pin	Signal	I/O	Voltage	Description
YC8	1	+24V3	O	24 V DC	24 V DC power output to MPSOL
Connected to the MP solenoid	2	MEFSOLN	O	0/24 V DC	MPSOL: On/Off
YC9	1	DHEATER	O	0/24 V DC	DH: On/Off
Connected to the drum heater	2	+24V1	O	24 V DC	24 V DC power output to DH
YC10	1	+24V1	O	24 V DC	24 V DC power output to PSFM
Connected to the power source fan motor	2	FANRN	O	0/24 V DC	PSFM: On/Off
YC12	1	+3.3V10	O	3.3 V DC	3.3 V DC power output to EFS
Connected to the eject full sensor	2	GND	-	-	Ground
	3	PAPFULN	I	0/3.3 V DC	EFS: On/Off
YC13	1	LIFTMOTOR	O	0/5 V DC	LM: On/Off
Connected to the lift motor	2	GND	-	-	Ground
YC14	1	+3.3V9	O	3.3 V DC	3.3 V DC power output to LS
Connected to the lift sensor	2	GND	-	-	Ground
	3	LSENS	I	0/3.3 V DC	LS: On/Off
YC15	1	+24V6	O	24 V DC	24 V DC power output to PM
Connected to the polygon motor	2	GND	-	-	Ground
	3	PLGDRN	O	0/5 V DC	PM: On/Off
	4	PLGRDYN	I	0/3.3 V DC	PM ready signal
	5	POLCLK	O	0/3.3 V DC(pulse)	PM clock signal
YC16	1	+5V5	O	5 V DC	5 V DC power output to APCPWB
Connected to the APC PWB	2	VDATA1P	O	LVDS	Video data 1 signal (+)
	3	VDATA1N	O	LVDS	Video data 1 signal (-)
	4	VDATA2P	O	LVDS	Video data 2 signal (+)
	5	VDATA2N	O	LVDS	Video data 2 signal (-)
	6	SAMPLEN1	O	0/3.3 V DC	Sample / hold signal 1
	7	SAMPLEN2	O	0/3.3 V DC	Sample / hold signal 2
	8	OUTPEN	O	0/3.3 V DC	Laser enable
	9	VCONT1	O	Analog	LD-1 Light volume adjustment
	10	VCONT2	O	Analog	LD-2 Light volume adjustment
	11	GND	-	-	Ground
	12	PDN	I	0/3.3 V DC (pulse)	Main scanning synchronizing signal

Connector	Pin	Signal	I/O	Voltage	Description
YC16	13	+3.3V6	O	3.3 V DC	3.3 V DC power output to APCPWB
YC17	1	+3.3V6	O	3.3 V DC	3.3 V DC power output to OPPWB
Connected to the operation PWB	2	FUPRSTN	O	0/3.3 V DC	OPPWB reset signal
	3	P2C_OK_KEY	I	0/3.3 V DC	OK KEY:On/Off
	4	C2P_BUZCON	O	0/3.3 V DC	Buzzer control signal
	5	AIRTEMP	I	Analog	Temperature sensor input signal
	6	C2P_LCDCON	O	0/5 V DC	LCD: On/Off
	7	+5V5	O	5 V DC	5 V DC power output to LCD
	8	P2C_SDAT	I	0/3.3 V DC	Data signal
	9	AIRWET	I	Analog	Humid sensor input signal
	10	C2P_SDAT	O	0/3.3 V DC	The data signal between panel main
	11	WETCLK	O	0/3.3 V DC (pulse)	Humid sensor clock signal
	12	LED	O	0/3.3 V DC	READY LED control signal
	13	FG	-	-	Ground
	14	GND	-	-	Ground
YC18	1	GND	-	-	Ground
Connected to the power switch	2	POWERSW	I	0/3.3 V DC	PSSW: On/Off
YC19	1	ENVSENSN	I	0/3.3 V DC	ENVS: On/Off
Connected to the high voltage PWB	2	GND	-	-	Ground
	3	MISENS	I	Analog	MC output signal
	4	MHVCLK	O	0/3.3 V DC (pulse)	MC clock signal
	5	MACCNT	O	Analog	MC AC control signal
	6	MDCCNT	O	Analog	MC DC control signal
	7	HVCLK	O	0/3.3 V DC (pulse)	DEV clock signal
	8	BDCNT	O	Analog	DEV DC control signal
	9	BACNT	O	Analog	DEV AC control signal
	10	PAPERSEN2N	I	0/3.3 V DC	EFS2: On/Off
	11	PAPERSEN1N	I	0/3.3 V DC	EFS1: On/Off
	12	REGSENSN	I	0/3.3 V DC	RS: On/Off
	13	DUJAMSEN2N	I	0/3.3 V DC	DUS: On/Off
	14	+3.3V6	O	3.3 V DC	3.3 V DC power output to HVPWB

Connector	Pin	Signal	I/O	Voltage	Description
YC19	15	SCNT	O	0/3.3 V DC	Separation output control signal
Connected to the high voltage PWB	16	TRREM	O	0/3.3 V DC	TC remote signal
	17	TCNT	O	Analog	TC control signal
	18	+24V3	O	24 V DC	24 V DC power output to HVPWB
YC20	A1	+5V2	O	5 V DC	5 V DC power output to MPWB
Connected to the main PWB	A2	+5V2	O	5 V DC	5 V DC power output to MPWB
	A3	GND	-	-	Ground
	A4	GND	-	-	Ground
	A5	VBUS	I	3.3 V DC	3.3 V DC power output to USB host
	A6	GND	-	-	Ground
	A7	C2P_BUZCON	I	0/3.3 V DC	Buzzer control signal
	A8	C2P_LCDCON	I	0/3.3 V DC	LCD: On/Off
	A9	C2P_SDAT	I	0/3.3 V DC	The data signal between panel main
	A10	SAMPLE1	I	0/3.3 V DC	Sample / hold signal 1
	A11	GND	-	-	Ground
	A12	VDATA2P	I	LVDS	Video data 2 signal (+)
	A13	VDATA2N	I	LVDS	Video data 2 signal (-)
	A14	GND	-	-	Ground
	A15	E2C_IRN	O	0/3.3 V DC	Engine interrupt signal
	A16	C2E_SDAT	I	0/3.3 V DC	Serial communication data input
	A17	E2C_SBSY	O	0/3.3 V DC	System busy signal
	A18	GND	-	-	Ground
	A19	GND	-	-	Ground
	A20	E2C_INT	O	0/3.3 V DC	Interrupt signal
	B1	+5V2	O	5 V DC	5 V DC power output to MPWB
	B2	+5V2	O	5 V DC	5 V DC power output to MPWB
	B3	GND	-	-	Ground
	B4	UDATAN	I/O	LVDS	USB host data signal (-)
	B5	UDATAP	I/O	LVDS	USB host data signal (+)
	B6	GND	-	-	Ground
	B7	FUPRSTN	I	0/3.3 V DC	OPPWB reset signal
	B8	P2C_PKEY	O	0/3.3 V DC	OK KEY:On/Off
	B9	P2C_SDAT	O	0/3.3 V DC	The data signal between panel main
	B10	SAMPLE2	I	0/3.3 V DC	Sample / hold signal 2
	B11	PDN	O	0/3.3 V DC (pulse)	Main scanning synchronizing signal

Connector	Pin	Signal	I/O	Voltage	Description
YC20	B12	VDATA1P	I	LVDS	Video data 1 signal (+)
Connected to the main PWB	B13	VDATA1N	I	LVDS	Video data 1 signal (-)
	B14	PLGCLK	I	0/3.3 V DC (pulse)	PM clock signal
	B15	E2C_SDAT	O	0/3.3 V DC (pulse)	Serial communication data output
	B16	C2E_SCKN	I	0/3.3 V DC (pulse)	Serial communication clock
	B17	E2C_SDIR	O	0/3.3 V DC	Communication direction change signal
	B18	VSYNC	O	0/3.3 V DC (pulse)	Sub scanning synchronizing signal
	B19	C2E_OFFRDY	I	0/3.3 V DC	Off-mode notice signal
	B20	C2E_INT	I	0/3.3 V DC	Interrupt signal
YC21	1	TH2	I	Analog	FUTH2 output signal
Connected to the fuser thermistor connect PWB	2	TH1	I	Analog	FUTH1output signal
	3	GND	-	-	Ground
	4	REARFANN	O	24 V DC	REFM: On/Off
	5	+24V4	O	24 V DC	24 V DC power output to FTHPWB
YC22	1	+24V5	O	24 V DC	24 V DC power output to PF
Connected to the paper feeder	2	OPSDO	O	0/3.3 V DC (pulse)	PF communication serial data signal
	3	OPSDI	I	0/3.3 V DC (pulse)	PF communication serial data signal
	4	OPCLK	O	0/3.3 V DC (pulse)	PF communication serial clock signal
	5	OPRDYN	I	0/3.3 V DC	Option communication ready signal
	6	+3.3V7	O	3.3 V DC	3.3 V DC power output to PF
	7	GND	-	-	Ground
	8	OPSEL2	O	0/3.3 V DC	PF select signal
	9	OPSEL1	O	0/3.3 V DC	PF select signal
	10	OPSEL0	O	0/3.3 V DC	PF select signal
	11	OPPAUSEN	O	0/3.3 V DC	Paper stop signal
	12	GND	-	-	Ground
YC23	1	VBUS	O	5 V DC	5 V DC power output to USB host
Connected to the USB host	2	UDATAN	I/O	LVDS	USB data signal (-)
	3	UDATAP	I/O	LVDS	USB data signal (+)
	4	GND	-	-	Ground
	5	GND	-	-	Ground
YC26	1	+3.3V13	O	3.3 V DC	3.3 V DC power output to ES
Connected to the eject sensor	2	GND	-	-	Ground
	3	EXITSENSN	I	0/3.3 V DC	ES: On/Off

2-3-3 Power source PWB (PSPWB)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2
YC2
1
3
13
YC3
1

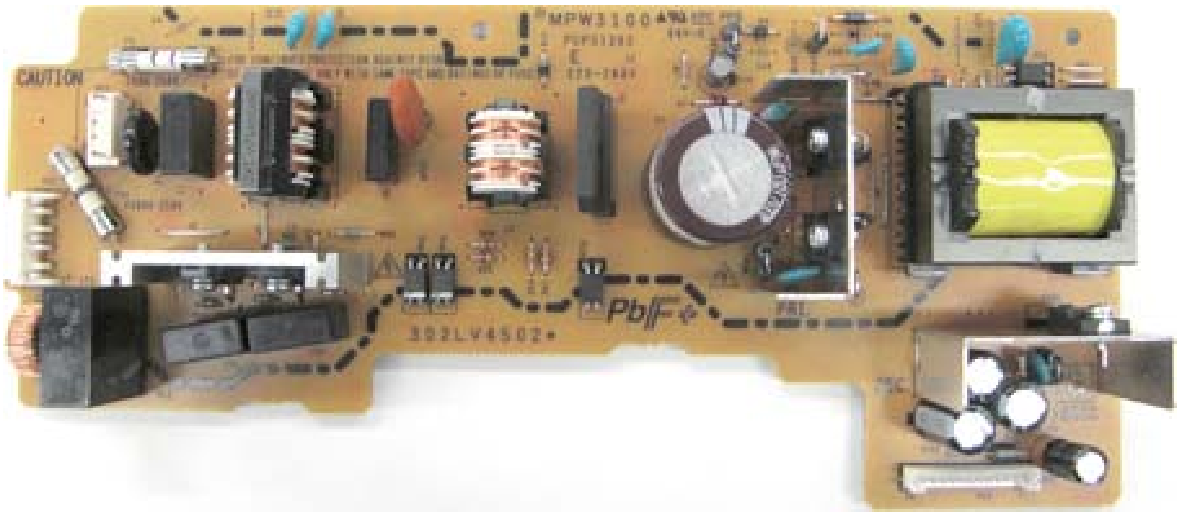
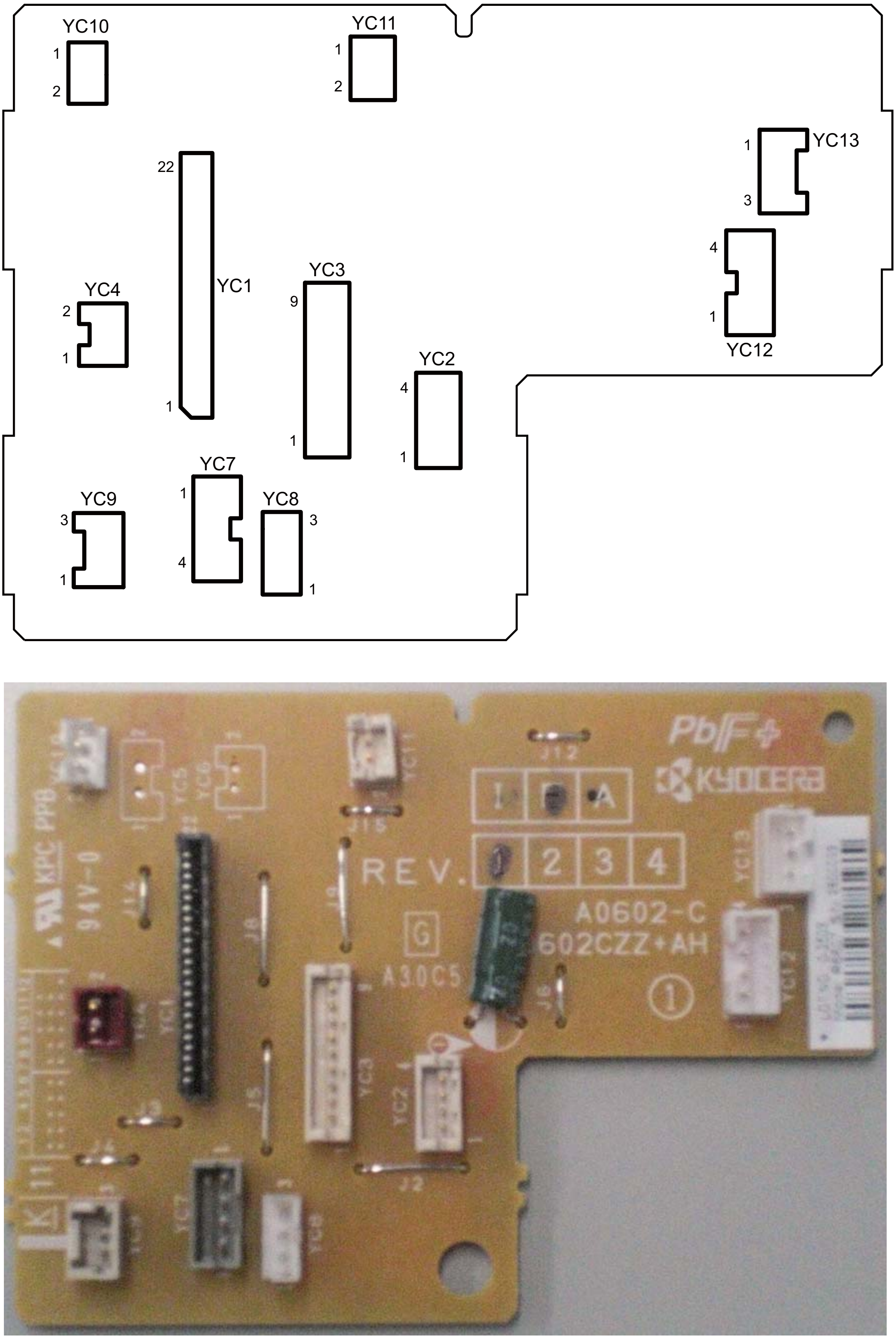


Figure 2-3-3 Power source PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	LIVE	I	100 V AC	AC power input
Connected to the inlet	2	NEUTRAL	I	100 V AC	AC power input
YC2	1	NEUTRAL1	I	100 V AC	Fuser heater
Connected to the fuser unit	2	LIVE	O	100 V AC	AC power input
	3	NEUTRAL2	I	100 V AC	Fuser heater
YC3	1	+24V1	O	24 V DC	24 V DC power output to EPWB
Connected to the engine PWB	2	+24V1	O	24 V DC	24 V DC power output to EPWB
	3	+24V1	O	24 V DC	24 V DC power output to EPWB
	4	+24V1	O	24 V DC	24 V DC power output to EPWB
	5	GND	-	-	Ground
	6	GND	-	-	Ground
	7	GND	-	-	Ground
	8	GND	-	-	Ground
	9	PSLEEPN	I	0/5 V DC	Sleep mode signal
	10	RELAY	I	0/5 V DC	Relay control
	11	ZCROSSN	O	0/5 V DC(pulse)	Zero crossing signal
	12	HEAT1REM	I	0/24 V DC	Fuser heater control
	13	HEAT2REM	I	0/24 V DC	Fuser heater control

2-3-4 Relay-L PWB (R-LPWB)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2
YC11
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2
YC13
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1
YC12
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YC1
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YC4
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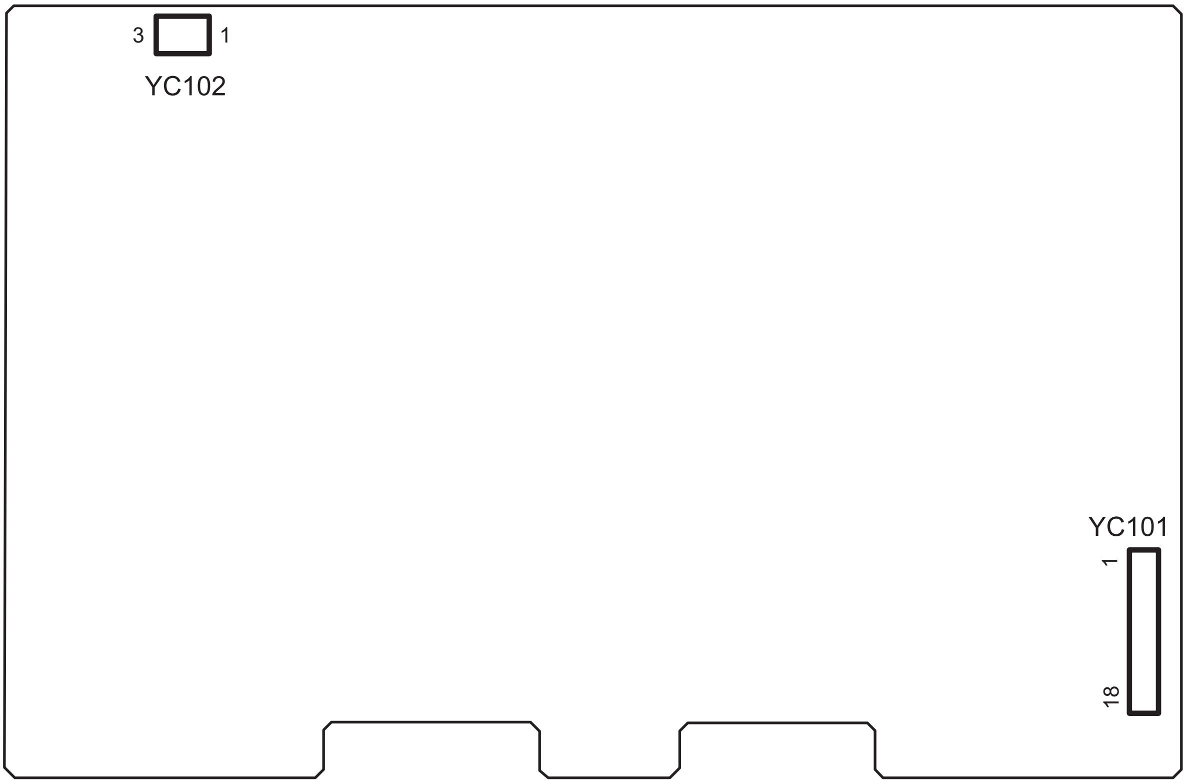
1
YC3
9
1
YC2
4
1
YC7
1
4
YC9
3
1
YC8
3
1
PbF
KYOCERA
REV.
1
2
3
4
A0602-C
602CZZ+AH
A3.0C5
94V-0
KPC PPB

Figure 2-3-4 Relay-L PWB silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC1	1	EECLK	I	0/3.3 V DC(pulse)	Clock signal
Connected to the engine PWB	2	GND	-	-	Ground
	3	EESIO	I/O	0/3.3 V DC	Data signal
	4	ERASER	I	0/3.3 V DC	CL control signal
	5	+3.3V6	I	3.3 V DC	3.3 V DC power input from EPWB
	6	TSENS	O	Analog	TS output signal
	7	SBMDIR	I	0/5 V DC	SBM: On/Off
	8	WTSENS	O	Analog	WTS output signal
	9	SBMENBLN	I	0/3.3 V DC	SBM output control signal
	10	WTLED	I	0/3.3 V DC	Waste toner LED control
	11	SBMSTEP	I	0/3.3 V DC	SBM step signal
	12	MEFSENS	O	0/3.3 V DC	MPS: On/Off
	13	SBMMODE	I	0/3.3 V DC	SBM mode control signal
	14	+3.3V2	I	3.3 V DC	3.3 V DC power input from EPWB
	15	TMOT	I	0/3.3 V DC	TM: On/Off
	16	LFANN	I	0/24 V DC	LFM: On/Off
	17	FUDR	I	0/24 V DC	FSSOL: On/Off
	18	ENVMOT	I	0/5 V DC	ENVM: On/Off
	19	FDDR	I	0/24 V DC	FSSOL: On/Off
	20	DUJAMSEN1N	O	0/3.3 V DC	DUS1: On/Off
	21	REGSEN2	O	0/3.3 V DC	RS2: On/ Off
	22	REARSWN	O	0/3.3 V DC	RECSW: On/Off
YC2	1	+24V6	I	24 V DC	24 V DC power input from EPWB
Connected to the engine PWB	2	GND		-	Ground
	3	GND		-	Ground
	4	+24V4	I	24 V DC	24 V DC power input from EPWB
YC3	1	TSENS	I	Analog	TS output signal
Connected to the drum connect PWB	2	+24V6	O	24 V DC	24 V DC power output to DRRPWB
	3	ERASERN	O	0/24 V DC	CL: On/Off
	4	EECLK	O	0/24 V DC(pulse)	Clock signal
	5	EESIO	I/O	0/3.3 V DC	Data signal
	6	TMOT	O	0/5 V DC	TM control signal
	7	+3.3V6	O	3.3 V DC	3.3 V DC power output to DRRPWB
	8	GND	-	-	Ground
	9	REGSEN2	I	0/3.3 V DC	RS2: On/Off

Connector	Pin	Signal	I/O	Voltage	Description
YC4	1	LFANN	-	0/24 V DC	LFM: On/Off
Connected to the LSU fan motor	2	+24V4	O	24 V DC	24 V DC power output to LSUFM
YC7	1	+3.3V12	O	3.3 V DC	3.3 V DC power output to WTS(LED)
Connected to the waste toner sensor	2	WTLEDN	I	0/3.3 V DC	WTS(LED): On/Off
	3	WTSENS	I	Analog	WTS output signal
	4	+3.3V6	O	3.3 V DC	3.3 V DC power output to WTS
YC8	1	+3.3V8	O	-	3.3 V DC power output to MPS
Connected to the MP paper sensor	2	GND	-	-	Ground
	3	MEFSENS	I	OC	MPS: On/Off
YC9	1	+3.3V11	O	3.3 V DC	3.3 V DC power output to DUS
Connected to the duplex sensor 1	2	GND	-	-	Ground
	3	DUJAMSEN1N	I	0/3.3 V DC	DUS: On/Off
YC10	1	REARSWN	I	0/3.3 V DC	RECSW: On/Off
Connected to the rear cover switch	2	GND	-	-	Ground
YC11	1	ENVMOT	O	0/5 V DC	FUPRM: On/Off
Connected to the fuser pressure release motor	2	GND	-	-	Ground
YC12	1	OUTB3	O	0/3.3 V DC	SBM B3 drive control signal
Connected to the shiftback motor	2	OUTB1	O	0/3.3 V DC	SBM B1 drive control signal
	3	OUTA3	O	0/3.3 V DC	SBM A3 drive control signal
	4	OUTA1	O	0/3.3 V DC	SBM A1 drive control signal
YC13	1	FACEDDRN	O	0/24 V DC	FSSOL: On/Off
Connected to the feed shift solenoid	2	+24V6	O	24 V DC	24 V DC power output to FSSOL
	3	FACEUDRN	O	0/24 V DC	FSSOL: On/Off

2-3-5 High voltage PWB (HVPWB)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YC102
YC101
1
18

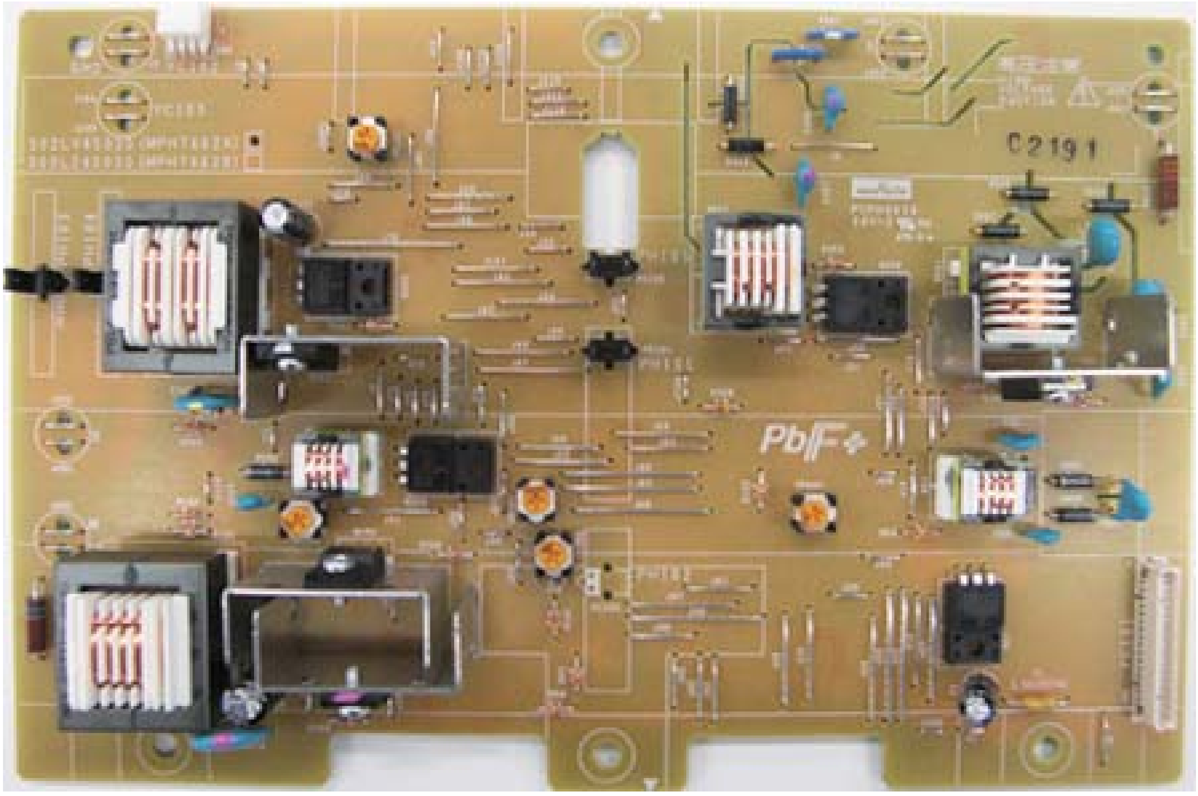

Figure 2-3-5 High voltage silk-screen diagram and Photograph

Connector	Pin	Signal	I/O	Voltage	Description
YC101	1	+24V3	O	24 V DC	24 V DC power output to EPWB
Connected to the engine PWB	2	TCNT	O	Analog	Transfer control
	3	TRREM	O	0/3.3 V DC	Transfer remote signal
	4	SCNT	O	Analog	Separation control
	5	+3.3V	O	3.3 V DC	3.3 V DC power output
	6	DUJAMSEN2N	I	0/3.3 V DC	DUS2:On/Off
	7	REGSENSN	I	0/3.3 V DC	RS:On/Off
	8	PAPERSEN1N	I	0/3.3 V DC	PS1:On/Off
	9	PAPERSEN2N	I	0/3.3 V DC	PS2:On/Off
	10	BACNT	I	Analog	Developer AC control
	11	BDCNT	I	Analog	Developer DC control
	12	HVCLK	O	0/3.3 V DC	Developer clock signal
	13	MDCCNT	I	Analog	Charger DC control
	14	MACCNT	I	Analog	Charger AC control
	15	MHVCLK	O	0/3.3 V DC	Charger clock signal
	16	MISENS	O	Analog	Charger current detection
	17	GND	-	-	Ground
	18	ENVSENSN	I	0/3.3 V DC	ES:On/Off
YC102	1	+3.3V14	O	3.3 V DC	3.3 V DC power output to FUPRS
Connected to the fuser pressure release sensor	2	GND	-	-	Ground
	3	ENVSENSN	I	0/3.3 V DC	FUPRS:On/Off

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2-4-1 Appendixes

(1) Maintenance kits

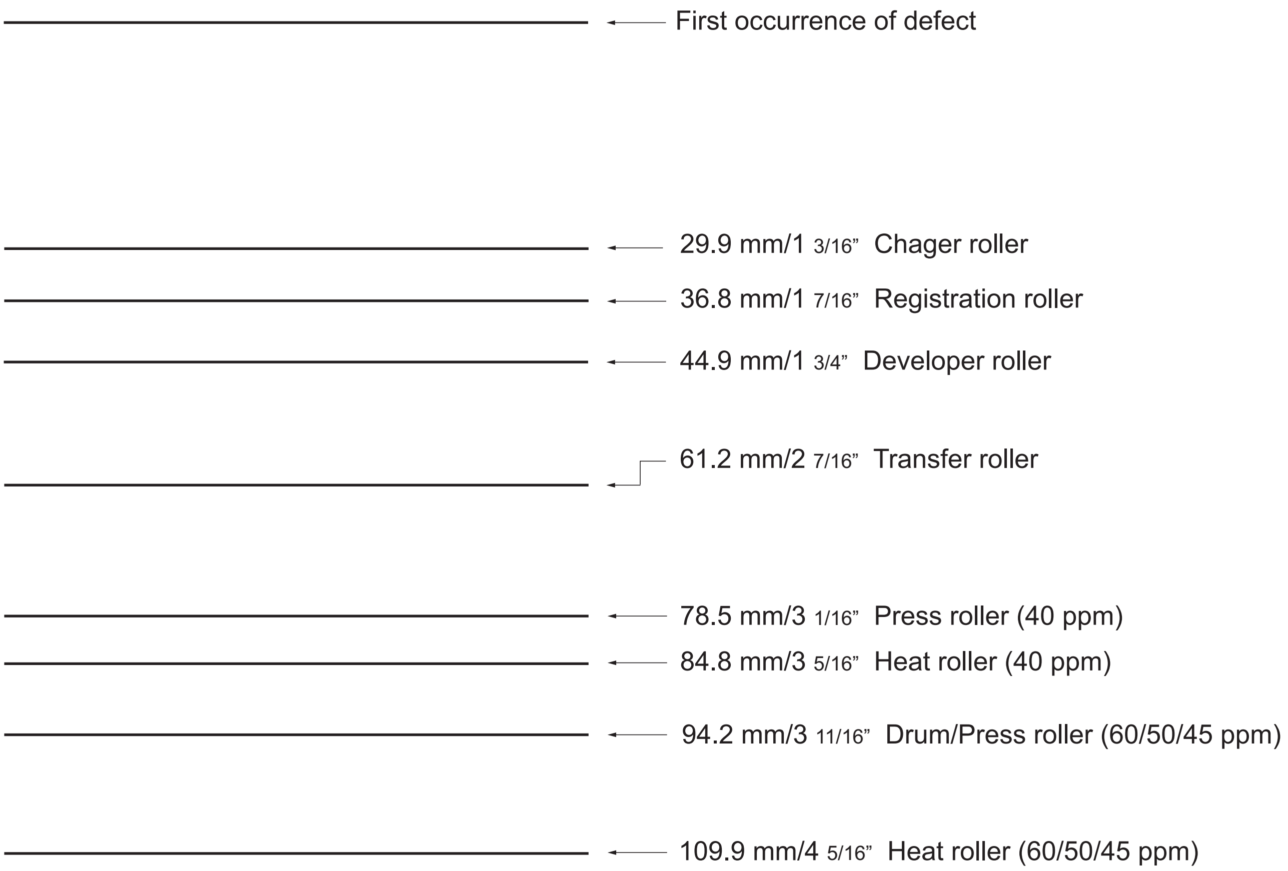
1. 60/50/45 ppm model

Maintenance part name		Parts No.	Alternative part No.
Name used in service	**Name used in parts list**		
MK-3130/MAINTENANCE KIT (500,000 images)	MK-3130/MAINTENANCE KIT	1702MT8NL0	072MT8NO
MK-3132/MAINTENANCE KIT (300,000 sheets)	MK-3132/MAINTENANCE KIT	1702MT8US0	072MT8UO
Transfer roller assembly	ROLLER TRANSFER ASSY	-	-
Drum unit	DRUM UNIT	-	-
Developer unit	DLP UNIT	-	-
Fuser unit	FUSER UNIT(KME)	-	-
Paper feed roller assembly	HOLDER FEED ASSY	-	-
Retard roller assembly	RETARD ROLLER ASSY	-	-

2. 40 ppm model

Maintenance part name		Parts No.	Alternative part No.
Name used in service	**Name used in parts list**		
MK-3100/MAINTENANCE KIT (300,000 sheets)	MK-3100/MAINTENANCE KIT	1702MS8NLP0	072MS8NO
MK-3102/MAINTENANCE KIT (300,000 images)	MK-3102/MAINTENANCE KIT	1702MT8US0	072MT8UO
Transfer roller assembly	ROLLER TRANSFER ASSY	-	-
Drum unit	DRUM UNIT	-	-
Developer unit	DLP UNIT	-	-
Fuser unit	FUSER UNIT(KME)	-	-
Paper feed roller assembly	HOLDER FEED ASSY	-	-
Retard roller assembly	RETARD ROLLER ASSY	-	-

(2) Repetitive defects gauge


First occurrence of defect
29.9 mm/1 3/16” Chager roller
36.8 mm/1 7/16” Registration roller
44.9 mm/1 3/4” Developer roller
61.2 mm/2 7/16” Transfer roller
78.5 mm/3 1/16” Press roller (40 ppm)
84.8 mm/3 5/16” Heat roller (40 ppm)
94.2 mm/3 11/16” Drum/Press roller (60/50/45 ppm)
109.9 mm/4 5/16” Heat roller (60/50/45 ppm)

(3) Firmware environment commands

The printer maintains a number of printing parameters in its memory. These parameters may be changed permanently with the FRPO (Firmware RePrOgram) commands.
This section provides information on how to use the FRPO command and its parameters using examples.

Using FRPO commands for reprogramming the firmware

The current settings of the FRPO parameters are listed as the optional values on the service status page.

Note: Before changing any FRPO parameters, print out a service status page, so you will know the parameter values before the changes are made. To return FRPO parameters to their factory default values, send the FRPO INIT (FRPO-INITialize) command.(!R! FRPO INIT; EXIT;)

The FRPO command is sent to the printer in the following sequence:
!R! FRPO parameter, value; EXIT;
Example: Changing emulation mode to PC-PR201/65A
!R! FRPO P1, 11; EXIT;

FRPO parameters

Item	FRPO	Setting values	Factory setting
Top margin	A1	Integer value in inches	0
	A2	Fraction value in 1/100 inches	0
Left margin	A3	Integer value in inches	0
	A4	Fraction value in 1/100 inches	0
Page length	A5	Integer value in inches	13
	A6	Fraction value in 1/100 inches	61
Page width	A7	Integer value in inches	13
	A8	Fraction value in 1/100 inches	61
Default pattern resolution	B8	0: 300 dpi 1: 600 dpi	0
Copy count	C0	Number of copies to print:1-999	1
Page orientation	C1	0: Portrait 1: Landscape	0
Default font No.	C2	Middle two digits of power-up font	0
	C3	Last two digits of power-up font	0
	C5	First two digits of power-up font	0
PCL font switch	C8	0:HP compatibility mode (Characters higher than 127 are not printed.) 32:Conventional mode (Characters higher than 127 are printed. Supported symbol sets: ISO-60 Norway [00D], ISO-15 Italian [00I], ISO-11 Sweden [00S], ISO-6 ASCII [00U], ISO-4 U.K. [01E], ISO-69 France [01F], ISO-21 Germany [01G], ISO-17 Spain [02S], Symbol [19M])	0

Item	FRPO	Setting values	Factory setting
Printing concentration	D4	1: Thin. 2: Slightly Thin. 3: Standard 4: Slightly Deep. 5: Deep.	3
Total host buffer size	H8	0 to 99 in units of the size defined by FRPO S5	5
Form feed time-out value	H9	Value in units of 5 seconds (0 to 99).	6
KIR mode	N0	0: Off 2: On	2
Duplex binding	N4	0: Off 1: Long edge 2: Short edge	0
Sleep timer time-out time	N5	1 to 240 minutes [0: Off] (U.S.A and other) 1 to 120 minutes [0: Off] (Euro only)	1 1 11(40ppm with network)
Ecoprint level	N6	0: Off 2: On	0
Resolution	N8	0: 300dpi 1: 600dpi 3: 1200dpi	1
Parallel interface mode	O0	0: Standard Mode 1: Fast Mode 5: Nibble (High Speed) Mode 70: Automatic Mode	70
Parallel interface Error control	O2	0: Line Control OFF 2: Compatibility with PCL	2
Default emulation mode	P1	0 : Line printer 1 : IBM proprinter 2 : DIABLO 630 5 : Epson LQ-850 6 : PCL6 (except PCL XL) 8 : KC-GL 9 : KPDL 11 : PC-PR201 12 : IBM 5577 13 : VP-1000 14 : N5200 15 : FMPR-359F1	9(U.S.A) or 6(Euro and other)
Carriage-return action *	P2	0: Ignores 0x0d 1: Carriage-return 2: Carriage-return+linefeed	1
Linefeed action *	P3	0: Ignores 0x0d 1: Linefeed 2: Linefeed+carriage-return	1

Item	FRPO	Setting values	Factory setting
Automatic emulation sensing (For KPDL3)	P4	0: AES disabled 1: AES enabled	1(U.S.A) or 0(Euro and other)
Alternative emulation	P5	6: PCL 6	6
Automatic emulation switching trigger (For KPDL3)	P7	0: Page eject commands 1: None 2: Page eject and PRESCRIBE EXIT 3: PRESCRIBE EXIT 4: Formfeed (^L) 6: Page eject, PRESCRIBE EXIT and formfeed 10: Page eject commands; if AES fails, resolves to KPDL	11(U.S.A) or 10(Euro and other)
Command recognition character	P9	ASCII code of 33 to 126	82 (R)
Default stacker	R0	1 (inner tray) 3 5	1
Default paper size	R2	0: Size of the default paper cassette (See R4.) 1: Monarch (3-7/8 × 7-1/2 inches) 2: Business (4-1/8 × 9-1/2 inches) 3: International DL (11 × 22 cm) 4: International C5 (16.2 × 22.9 cm) 5: Executive (7-1/4 × 10-1/2 inches) 6: US Letter (8-1/2 × 11 inches) 7: US Legal (8-1/2 × 14 inches) 8: A4 (21.0 × 29.7 cm) 9: JIS B5 (18.2 × 25.7 cm) 10: A3 (29.7 ´ 42 cm) 11: B4 (25.7 ´ 36.4 cm) 12: US Ledger (11 ´ 17 inches) 13: ISO A5 14: A6 (10.5 × 14.8 cm) 15: JIS B6 (12.8 × 18.2 cm) 16: Commercial #9 (3-7/8 × 8-7/8 inches) 17: Commercial #6 (3-5/8 × 6-1/2 inches) 18: ISO B5 (17.6 × 25 cm) 19: Custom (11.7 × 17.7 inches) 30: C4 (22.9 ´ 32.4 cm) 31: Hagaki (10 × 14.8 cm) 32: Ofuku-hagaki (14.8 × 20 cm) 33: Officio II 39: 8K 40: 16K 42: 216x340 50: Statement 51: Folio 52: Youkei 2 53: Youkei 4	0

Item	FRPO	Setting values	Factory setting
Default cassette	R4	0: MP tray 1: Cassette 1 2: Cassette 2 3: Cassette 3	1
MP tray paper size	R7	Same as the R2 values except: 0	6 (U.S.A) or 8 (Euro and other)
A4/letter equation	S4	0: Off 1: On	1
Host buffer size	S5	0: 10kB (x H8) 1: 100kB (x H8) 2: 1024kB (x H8)	1
RAM disk size	S6	1 to 1024 MB	400
RAM disk mode	S7	0: Off 1: On	0 (Euro) 1
Wide A4	T6	0: Off 1: On	0
Line spacing	U0	Lines per inch (integer value)	6
Line spacing	U1	Lines per inch (fraction value)	0
Character spacing	U2	Characters per inch (integer value)	10
Character spacing	U3	Characters per inch (fraction value)	0

Item	FRPO	Setting values	Factory setting
Country code	U6	0: US-ASCII 1: France 2: Germany 3: UK 4: Denmark 5: Sweden 6: Italy 7: Spain 8: Japan 9: US Legal 10: IBM PC-850 (Multilingual) 11: IBM PC-860 (Portuguese) 12: IBM PC-863 (Canadian French) 13: IBM PC-865 (Norwegian) 14: Norway 15: Denmark 2 16: Spain 2 17: Latin America 21: US ASCII (U7 = 50 SET) 77: HP Roman-8 (U7 = 52 SET)	41
Code set at power up in daisy-wheel emulation	U7	0: Same as the default emulation mode (P1) 1: IBM 6: IBM PC-8 50: US ASCII (U6 = 21 SET) 52: HP Roman-8 (U6 = 77 SET)	53
Font pitch for fixed pitch scalable font	U8	Integer value in cpi: 0 to 99	10
	U9	Fraction value in 1/100 cpi: 0 to 99	0
Font height for the default scalable font	V0	Integer value in 100 points: 0 to 9	0
	V1	Integer value in points: 0 to 99	12
	V2	Fraction value in 1/100 points: 0, 25, 50, 75	0
Default scalable font	V3	Name of typeface of up to 32 characters, enclosed with single or double quotation marks	Courier
Default weight (courier and letter Gothic)	V9	0: Courier = darkness Letter Gothic = darkness 1: Courier = regular Letter Gothic = darkness 4: Courier = darkness Letter Gothic = regular 5: Courier = regular Letter Gothic = regular	5

Item	FRPO	Setting values	Factory setting
Paper type for the MP tray	X0	1: Plain 1 2: Transparency 3: Preprinted 4: Label 5: Bond 6: Recycle 7: Vellum 9: Letterhead 10: Color 11: Prepunched 12: Envelope 13: Cardstock 16: Thick 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1
Paper type for paper cassettes 1	X1	1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1

Item	FRPO	Setting values	Factory setting
Paper type for paper cassettes 2 to 5	X2 X3 X4 X5	1: Plain 3: Preprinted 5: Bond 6: Recycled 9: Letterhead 10: Color 11: Prepunched 17: High quality 21: Custom1 22: Custom2 23: Custom3 24: Custom4 25: Custom5 26: Custom6 27: Custom7 28: Custom8	1
PCL paper source	X9	0: Paper selection depending on an escape sequence compatible with HP-LJ5Si. 2: Paper selection depending on an escape sequence compatible with HP-LJ8000.	0
Automatic continue for ‘Press GO’	Y0	0: Off 1: On	0
Automatic continue timer	Y1	Number from 0 to 99 in increments of 5 seconds	6 (30 secons)
Heater ON/OFF switch	Y2	0: Heater OFF at the time of "Ready" 1: Heater ON at the time of "Ready"	0
Error message for device error	Y3	0: Not detect 1: Detect	0

Item	FRPO	Setting values	Factory setting
Duplex operation for specified paper type (Prepunched, Preprintedand Letterhead)	Y4	0: Off 1: On	0
Default operation for PDF direct printing	Y5	0: Enlarges or reduces the image to fit in the current paper size. Loads paper from the current paper cassette. 1: Through the image. Loads paper which is the same size as the image. 2: Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the image size. 3: Through the image. Loads Letter, A4 size paper depending on the image size. 8: Through the image. Loads paper from the current paper cassette. 9: Through the image. Loads Letter, A4 size paper depending on the image size. 10: Enlarges or reduces the image to fit in the current paper size. Loads Letter, A4 size paper depending on the imagesize.	0
e-MPS error	Y6	0:Does not print the error report and display the error message. 1:Prints the error report. 2:Displays the error message. 3:Prints the error report and displays the error message.	3

(4) Maintenance Commands

This section provides information on how to use the maintenance command and its parameters using examples.

Adjusting the print start timing (alternative command for the maintenance mode U034)

Description

Adjusts the leading edge registration or left edge.

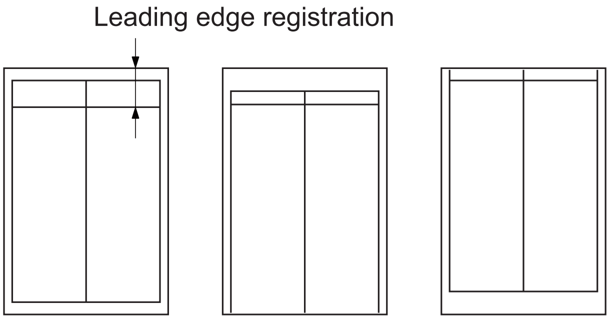
Purpose

Make the adjustment if there is a regular error between the leading edges of the copy image and original.
Make the adjustment if there is a regular error between the left edges of the copy image and original.

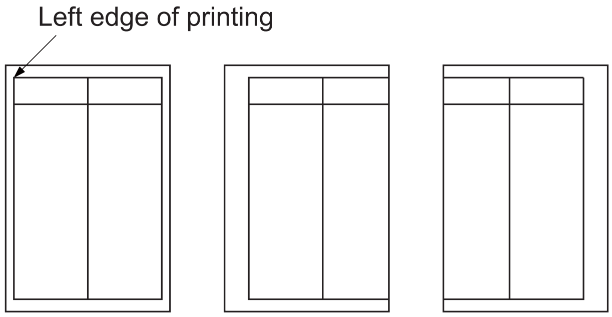
Format	!R! KCFG“PFRC”,#1 ,#2 ,#3;	
Parameter	#1	Paper source number 0: MP tray 2-6 : Cassette2-6 100: Duplex (e.g. landscape images short-edge bind) 200: Rotated duplex (e.g. portrait images long-edge bind)
	#2	Edge to adjust 1: Leading edge 2: Left edge
	#3	Adjustable range (-128 to +127) number of dot in 600dpi

Example: Set the leading edge of MP tray to +30 dots

!R! KCFG “PFRC”,0,1,30;EXIT;



Correct image   Output example 1   Output example 2



Correct image   Output example 1   Output example 2

(5) System Error (Fxxxx) Outline

The document is subscribed to describe the outline of the factors of the Fxxx errors that are not described in the service manual. Please utilize it to refer to checking the factors.

Note: Please initially check the following when the error (Fxxx) is indicated.

Check the DDR2 memory and neighboring parts : Check the contact with YS1 on the main PWB by releasing and reinserting the memory, and check if the foreign objects such as the dust don’t adhere inside and if the pins aren't deformed. If the error repeats after that, replace the memory.
Check the SSD (optional HD-6) if the error repeats after replacing the memory.
The storage data in the SSD is initialized when formatting or replacing the SSD.
Thus, newly install the data in the formatted SSD or new SSD.

Check the SSD: Replace the SSD if the error repeats after formatting the SSD (Note1).

Note1: Procedures for formatting the SSD. (It is also indicated at Operation Manual.)
1. Press <MENU>.
2. Press the up/down arrow keys and select [Device Common]. Press <OK>.
3. Press the up/down arrow keys and select [Format SSD]. Press <OK>.
4. The confirmation screen (in the figure below) appears. Press [Yes]. (Press the left arrow key.)
5. [Formatting…] appears and formatting SSD starts.
→ After finishing the formatting SSD, the screen is recovered to the standby screen.

Format.
Are you sure?
--> SSD
[Yes] [No]

Caution: Formatting SSD The following storage data in the SSD (optional HD-6) is initialized after formatting the SSD. (Back-up from the SSD is not available.)

Font data, API data, Macro data, Printable data, Document box,
Job storage (User box/Quick copy/Proof and hold/Private print/Job storage)

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
-	Lock-up at Welcome/start display (TASKalfa/Ecosys) (The display unchages after a certain time (Note 1: *** seconds))	1) Check connection of the harness (Panel to Main board), (Main board to HDD) and connectors and check function. 2) Check contact of the DDR memory by detaching and reattaching. and check function. replace it if available and check function. 3) Format the HDD and check function. (U024 FULL formatting) (*1) 4) Execute the U021Memory initializing to initialize the controller backup memory and check function. 5) Replace the panelmain board and check function. 6) Replace the main board and check function. 7) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*User data and installed software is deleted if executing the U024. Reinstallation is required.	Check procedure is partly corrected as below. 3) Format the SSD and check function.([Formatting SSD) 4) (Not applicable) [Main - Panel Interface] (Engine board relays) Main board: YC2 Engine board: YC20, YC17 Panel board: YC1 [Check the contact with the DDR2 memory] Main board: YS1 (Note 1) 60 seconds F000 is indicated when the controller doesn't send the initial communication for 60 seconds after starting up the main power, or when the controller does not reply for 60 seconds since the communication from the panel board to the controller.
F000	CF000 appears in a certain time (Note 2: *** seconds) after the Welcome/start display continues Panel－Main board communication error	1) Check connection of the harness (Panel to Main board), (Main board to HDD) and connectors and check function. 2) Check contact of the DDR memory by detaching and reattaching. and check function. replace it if available and check function. 3) Format the HDD and check function. (U024 FULL formatting) (*1) 4) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 5) Replace the main board and check function. 6) Replace the panelmain board and check function. 7) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 3) Format the SSD and check function.([Formatting SSD) 4) (Not applicable) [Main - Panel Interface] (Engine board relays) Main board: YC2 Engine board: YC20, YC17 Panel board: YC1 [Check the contact with the DDR2 memory] Main board: YS1 (Note 1) 60 seconds F000 is indicated when the controller doesn't send the initial communication for 60 seconds after starting up the main power, or when the controller does not reply for 60 seconds since the communication from the panel board to the controller.
F10X	An error is detected at OS or some of device drivers.	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F11X				
F12X	An error is detected at the Scan control section	1) Check connection of the harness (Scan/DP - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the Scan/DP board and check function. 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F13X	An error is detected at the Panel control section	1) Check connection of the harness (Panel - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the panel board and check function. (*2) 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only. (*2) For the model separating the main/panel PWBs.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F14X	An error is detected at the FAX control section	1) Check connection of the harness (FAX - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Execute the U671 Clear FAX back up data (FAX DIMM clear) and check function. (*3) (Take cae of the received data since it is cleared) 5) Replace the FAX_DIMM and check function. 6) Replace the FAX board and check function. 7) Replace the main board and check function. 8) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only. (*3) For the models using the main PWB with the flash for the FAX data.		-
F15X	An error is detected at the authentication device control section	1) Check connection of the harness (Authentication device - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the main board and check function. 5) Replace the HDD and check function. (*1) 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	Authentication device: Card Reader, etc.	Check procedure is partly corrected as below. 2) Format the SSD and check function.([Formatting SSD) 3) (Not applicable) 5) Replace the SSD and check function. [Main/Engine - USB Host Interface] Main board: YC10 (USB Host at the machine rear side) Engine board: YC23 (USB Host under the operation panel)
F16X	An error is detected at the KMAS control section	1) Check connection of the harness (KMAS - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		
F17X	An error is detected at the print data control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F18X	An error is detected at the Video control secion	1) Check connection of the harness (Engine - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the engine board and check function. 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) [Main - Engine Interface] Main board: YC2 Engine board: YC20
F19X	An error is detected at the OS or some of device drivers	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F1AX				
F1BX	An error is detected at the Security management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F1CX	An error is detected at the File System management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*The F1C4 error appears with the HDD security kit at work.	Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F1DX	An error is detected at the Image memory management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*The F1D4 error is RAM allocation error. 1. Check it with the U340 2. Initialize the setting valued with the U021	Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F1EX	An error is detected at the OS or some of device drivers	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F1FX				
F20X				

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F21X F22X F23X	An error is detected at the Image processing section	1) Check contact of the DDR memory and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the main board and check function. 5) Replace the HDD and check function. (*1) 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 2) Format the SSD and check function.([Formatting SSD) 3) (Not applicable) 5) Replace the SSD and check function. [DDR2 memory contact check] Main board: YS1 A certain part of the memory may be faulty. The frequency of faiure occurrence is dependent on the frequency of access to the faulty bit. The memories except the DIMM are mounted on the main PWB. The mounted memories or the ASIC may be faulty if the DIMM is not sensitive.
F24X	An error is detected at the System management section	1) Check contact of the DDR memory and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the main board and check function. 5) Replace the HDD and check function. (*1) 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*The F248 eror is printer process error. if it repeats with a certain print data, retrieve the capture data and USBLOG.	Check procedure is partly corrected as below. 2) Format the SSD and check function.([Formatting SSD) 3) (Not applicable) 5) Replace the SSD and check function. [DDR2 memory contact check] Main board: YS1 A certain part of the memory may be faulty. The frequency of faiure occurrence is dependent on the frequency of access to the faulty bit. The memories except the DIMM are mounted on the main PWB. The mounted memories or the ASIC may be faulty if the DIMM is not sensitive.
F25X	An error is detected at the Network management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Retrieve the USBLOG and contact the Service Administratuve Division. (*1) (or retrieve the packet capture data depending on the reult of analysis) (*1) For the HDD standard model only.	*This may be owing to the users network environment.	Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable)
F26X F27X F28X F29X F2AX	An error is detected at the System management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F2BX F2CX F2DX F2EX F2FX F30X F31X F32X	An error is detected at the Network control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Retrieve the USBLOG and contact the Service Administratuve Division. (*1) (or retrieve the packet capture data depending on the reult of analysis) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable)

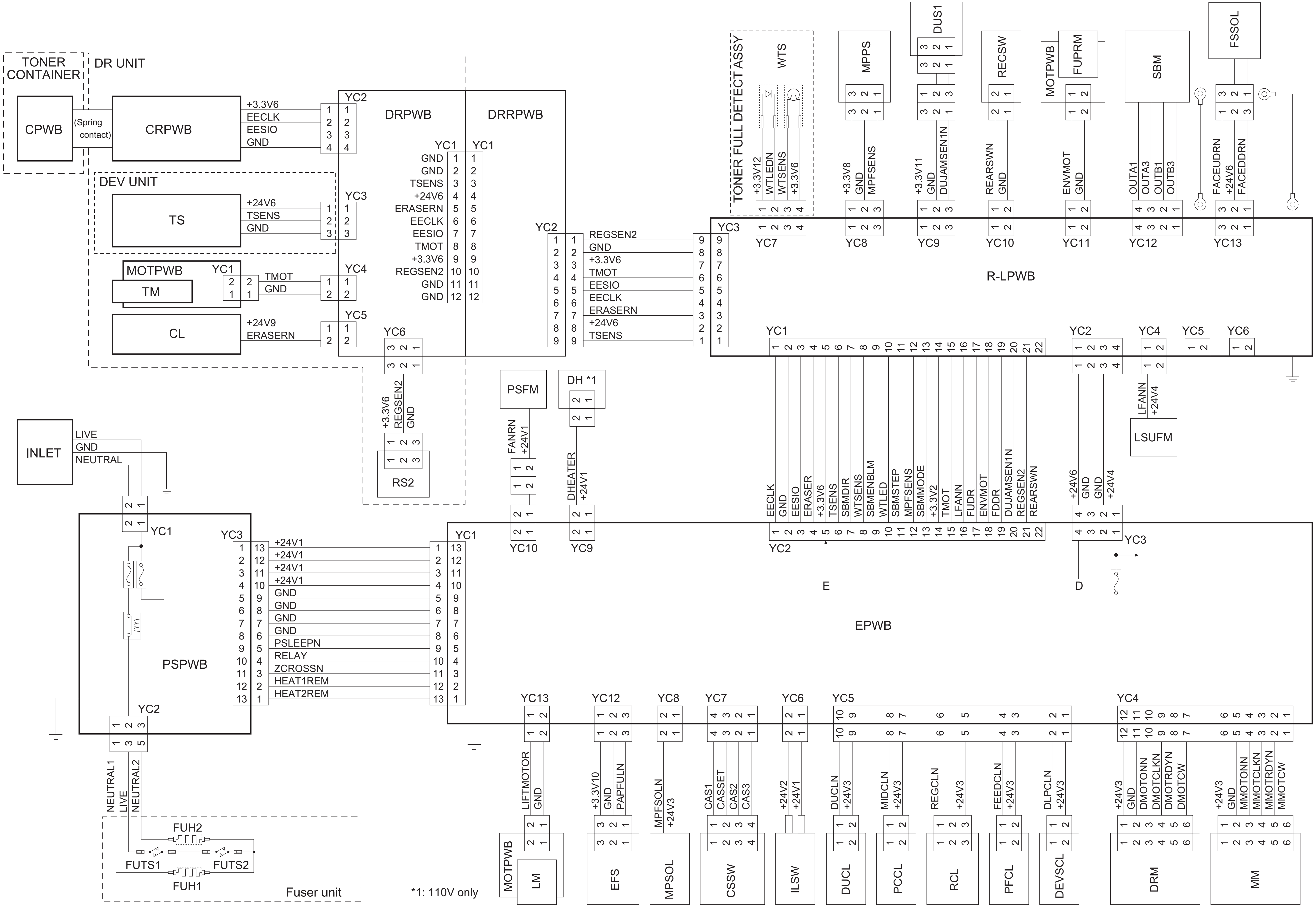
No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F33X	An error is detected at the Scan management section	1) Check connection of the harness (Scan/DP board - main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the Scan/DP board and check function. 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-
F34X	An error is detected at the Panel management section	1) Check connection of the harness (Panel board - main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 4) Replace the panel board and check function. (*2) 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only. (*2) For the models separating the panel/main PWBs.		Check procedure is partly corrected as below. 2) Format the SSD and check function.([Formatting SSD) 3) (Not applicable) [Main - Panel Interface] (Engine board relays) Main board: YC2 Engine board: YC20, YC17 Panel board: YC1
F35X	An error is detected at the Print control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F36X	An error is detected at the Print management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F37X	An error is detected at the FAX management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Execute the U671 Clear FAX back up data (FAX DIMM clear) and check function. (*3) (Take cae of the received data since it is cleared) 4) Replace the FAX_DIMM and check function. 5) Replace the main board and check function. 6) Replace the HDD and check function. (*1) 7) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only. (*3) For the models using the main PWB with the flash for the FAX data.		-

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F38X	An error is detected at the Authentication/permit management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F39X	An error is detected at the KMAS control section	1) Check connection of the harness (KMAS - Main board) and connectors and check function. 2) Format the HDD and check function. (U024 FULL formatting) (*1) 3) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-
F3AX	An error is detected at the Entity management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F3BX				
F3CX				
F3DX				
F3EX				
F3FX				
F40X				
F41X				
F42X				
F43X				
F44X				
F45X				
F46X	An error is detected at the Print image process section	1) Replace the main board and check function. 2) Retrieve the USBLOG (*1) (or retrieve the print capture data by case)	*The F46F is printer process error. If it repeats with a certain print data, retrieve the capture data and USBLOG.	
F47X	An error is detected at the Image edit process control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F48X				
F49X				
F4AX	An error is detected at the Print image process section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F4CX				

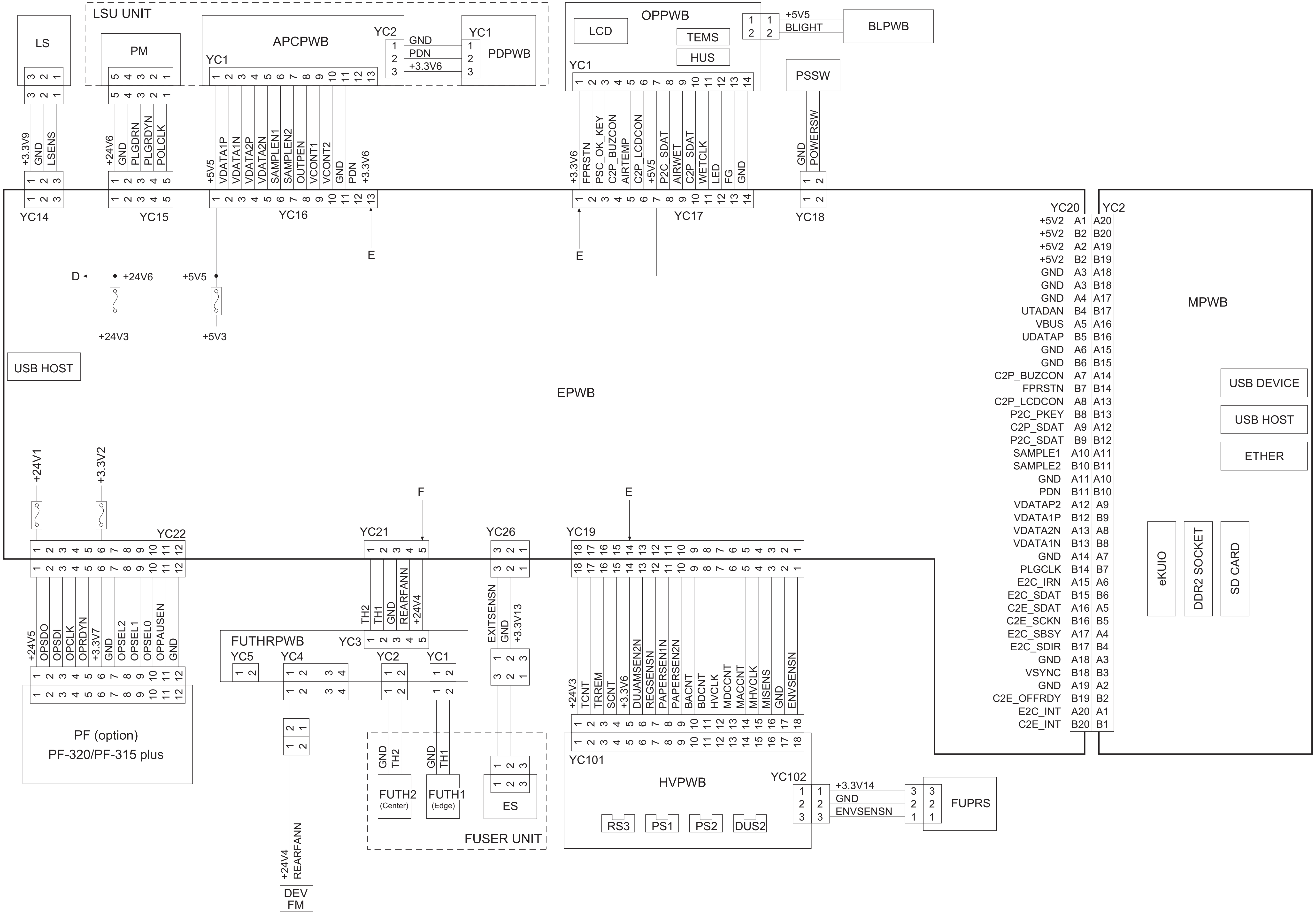
No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F4DX F4EX	An error is detected at the Entity control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F4FX	An error is detected at the Job control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F50X	An error is detected at the FAX control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-
F51X F52X F53X F55X F56X F57X	An error is detected at the Job execution section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F58X F59X F5AX F5BX F5CX F5DX F5EX	An error is detected at the Service management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F5FX	An error is detected at the Service execution section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F60X	An error is detected at the Maintenance mode management section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-

No.	Content	Check procedure & check point	Remark 1	P-4030D / P-4030DN / P-4530DN P-5030DN / P-6030DN
F61X	An error is detected at the Report compiling section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F62X	An error is detected at the Service execution section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F63X	An error is detected at the Device control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F64X	An error is detected at the Print image process section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F65X				
F66X				
F67X				
F68X	An error is detected at the Storage device control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*F684 is overwrite error with the HDD security kit	Check procedure is partly corrected as below. 1) Format the SSD and check function.([Formatting SSD) 2) (Not applicable) 4) Replace the SSD and check function.
F69X	An error is detected at the HyPAS control section	1) Format the HDD and check function. (U024 FULL formatting) (*1) 2) Execute the U021 Memory initializing to initialize the controller backup memory and check function. 3) Replace the main board and check function. 4) Replace the HDD and check function. (*1) 5) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.		-
F6AX				
F6BX				
F6CX				
F6DX	An error is detected at the External Server management section	1) Check the external server and check function. 2) Chekc the connection to the external server and check function. 3) Check the network settings and check function. 4) Replace the bridge board and check function. 5) Replace the main board and check function. 6) Retrieve the USBLOG and contact the Service Administrative Division. (*1) (*1) For the HDD standard model only.	*FieryOption related	-
F6EX				
F6FX				
F70X				
F71X				
F72X				
F73X				
F74X				
F75X				

(6) Wiring diagram (60/50/45 ppm model)


TONER CONTAINER
CPWB
(Spring contact)
CRPWB
DR UNIT
DRPWB
DRRPWB
DEV UNIT
TS
MOTPWB
TM
CL
+3.3V6
EECLK
EESIO
GND
+24V6
TSENS
TMOT
+24V9
ERASERN
YC1
YC2
YC3
YC4
YC5
YC6
REGSEN2
+24V6
TSENS
RS2
TONER FULL DETECT ASSY
WTS
+3.3V12
WTLEDN
WTSENS
MPPS
+3.3V8
MPFSENS
DUS1
+3.3V11
DUJAMSEN1N
RECSW
REARSWN
FUPRM
ENVMOT
SBM
OUTA1
OUTA3
OUTB1
OUTB3
FSSOL
FACEUDRN
FACEDDRN
YC7
YC8
YC9
YC10
YC11
YC12
YC13
R-LPWB
LFANN
+24V4
LSUFM
PSFM
FANRN
+24V1
DH *1
DHEATER
INLET
LIVE
GND
NEUTRAL
PSPWB
+24V1
PSLEEPN
RELAY
ZCROSSN
HEAT1REM
HEAT2REM
EPWB
EECLK
GND
EESIO
ERASER
+3.3V6
TSENS
SBMDIR
WTSENS
SBMENBLM
WTLED
SBMSTEP
MPFSENS
SBMMODE
+3.3V2
TMOT
LFANN
FUDR
ENVMOT
FDDR
DUJAMSEN1N
REGSEN2
REARSWN
+24V6
+24V4
E
D
NEUTRAL1
LIVE
NEUTRAL2
FUH2
FUTS1
FUTS2
FUH1
Fuser unit
LIFTMOTOR
LM
+3.3V10
PAPFULN
EFS
MPFSOLN
+24V3
MPSOL
CAS1
CASSET
CAS2
CAS3
CSSW
+24V2
ILSW
DUCLN
DUCL
MIDCLN
PCCL
REGCLN
RCL
FEEDCLN
PFCL
DLPCLN
DEVSCL
DMOTONN
DMOTCLKN
DMOTRDYN
DMOTCW
DRM
MMOTONN
MMOTCLKN
MMOTRDYN
MMOTCW
MM

*1: 110V only


LS
LSU UNIT
PM
APCPWB
YC2
YC1
PDPWB
GND
PDN
+3.3V6
OPPWB
LCD
TEMS
HUS
BLPWB
+5V5
BLIGHT
PSSW
+3.3V9
GND
LSENS
+24V6
GND
PLGDRN
PLGRDYN
POLCLK
+5V5
VDATA1P
VDATA1N
VDATA2P
VDATA2N
SAMPLEN1
SAMPLEN2
OUTPEN
VCONT1
VCONT2
GND
PDN
+3.3V6
+3.3V6
FPRSTN
PSC_OK_KEY
C2P_BUZCON
AIRTEMP
C2P_LCDCON
+5V5
P2C_SDAT
AIRWET
C2P_SDAT
WETCLK
LED
FG
GND
GND
POWERSW
YC14
YC15
YC16
YC17
YC18
E
D
+24V6
+5V5
+24V3
+5V3
USB HOST
EPWB
YC20
YC2
+5V2
+5V2
+5V2
+5V2
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GND
UTADAN
VBUS
UDATAP
GND
GND
C2P_BUZCON
FPRSTN
C2P_LCDCON
P2C_PKEY
C2P_SDAT
P2C_SDAT
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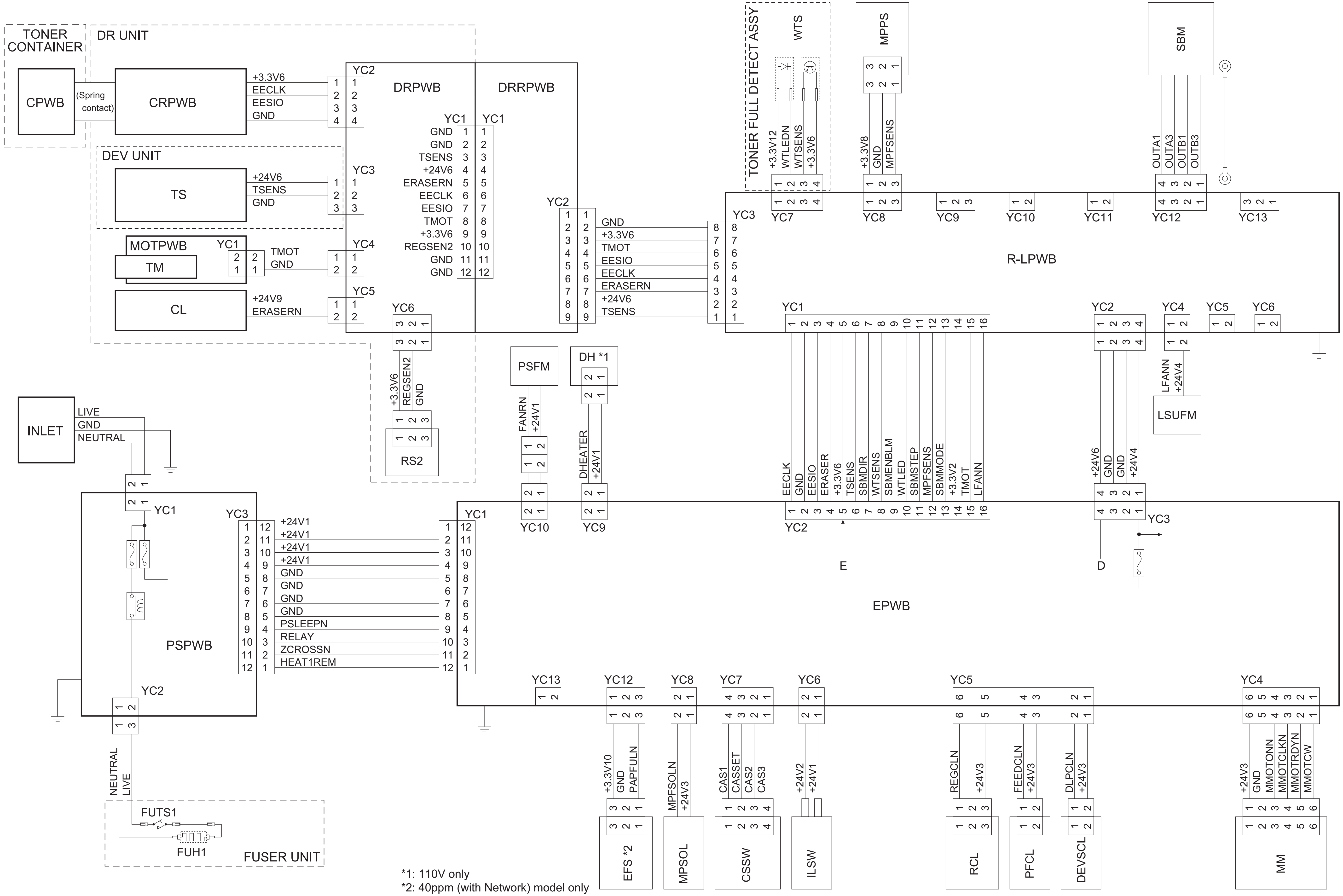
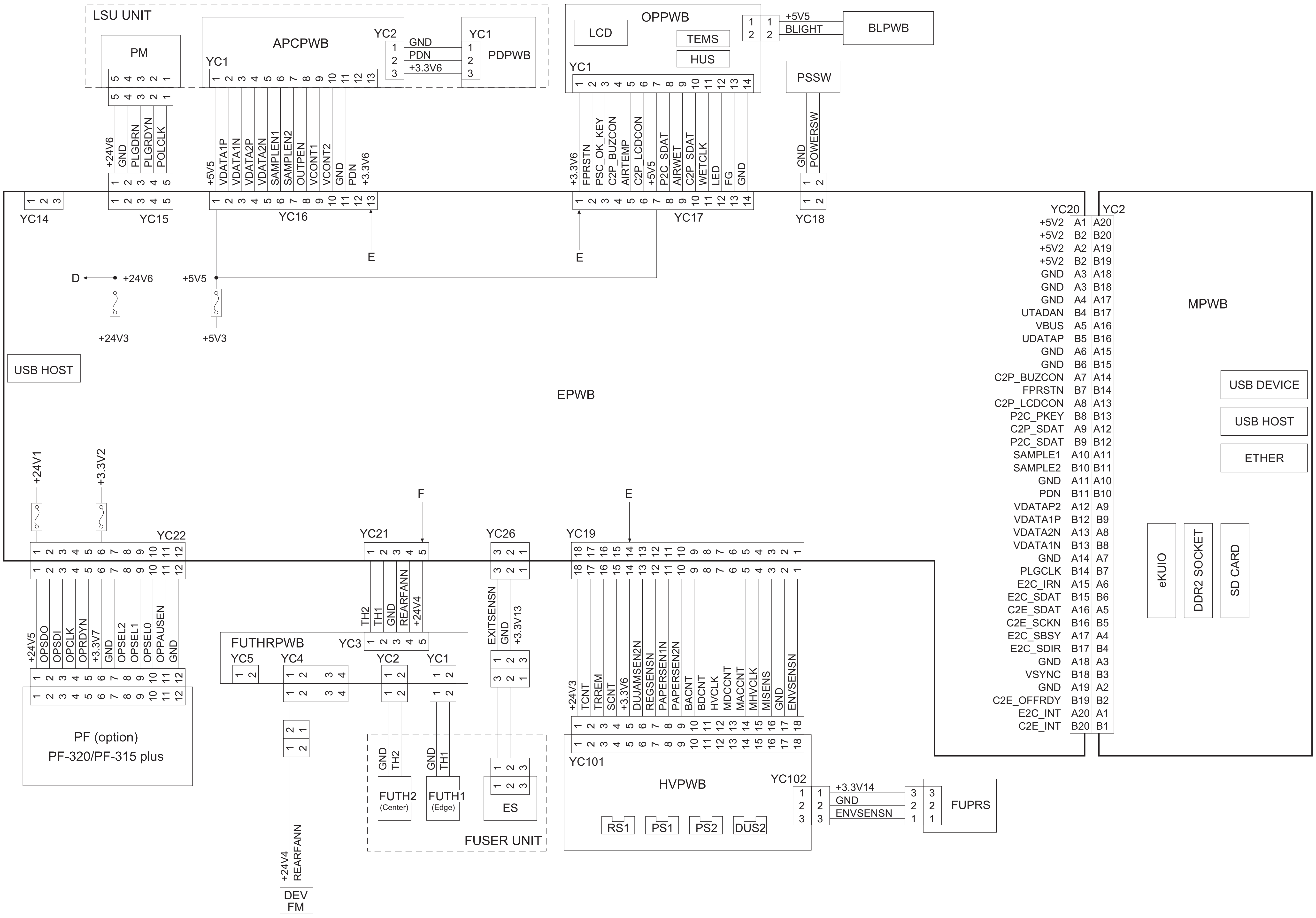
SAMPLE2
GND
PDN
VDATAP2
VDATA1P
VDATA2N
VDATA1N
GND
PLGCLK
E2C_IRN
E2C_SDAT
C2E_SDAT
C2E_SCKN
E2C_SBSY
E2C_SDIR
GND
VSYNC
GND
C2E_OFFRDY
E2C_INT
C2E_INT
MPWB
USB DEVICE
USB HOST
ETHER
eKUIO
DDR2 SOCKET
SD CARD
+24V1
+3.3V2
F
E
YC22
YC21
YC26
YC19
+24V5
OPSDO
OPSDI
OPCLK
OPRDYN
+3.3V7
GND
OPSEL2
OPSEL1
OPSEL0
OPPAUSEN
GND
TH2
TH1
GND
REARFANN
+24V4
EXITSENSN
GND
+3.3V13
FUTHRPWB
YC3
YC5
YC4
YC2
YC1
+24V3
TCNT
TRREM
SCNT
+3.3V6
DUJAMSEN2N
REGSENSN
PAPERSEN1N
PAPERSEN2N
BACNT
BDCNT
HVCLK
MDCCNT
MACCNT
MHVCLK
MISENS
GND
ENVSENSN
PF (option)
PF-320/PF-315 plus
GND
TH2
GND
TH1
FUTH2
(Center)
FUTH1
(Edge)
ES
FUSER UNIT
YC101
HVPWB
YC102
RS3
PS1
PS2
DUS2
+3.3V14
GND
ENVSENSN
FUPRS
+24V4
REARFANN
DEV FM

(7) Wiring diagram (40ppm model)


TONER CONTAINER
CPWB
(Spring contact)
DR UNIT
CRPWB
+3.3V6
EECLK
EESIO
GND
DEV UNIT
TS
+24V6
TSENS
GND
MOTPWB
TM
YC1
TMOT
GND
CL
+24V9
ERASERN
DRPWB
DRRPWB
YC2
YC3
YC4
YC5
YC6
YC1
GND
GND
TSENS
+24V6
ERASERN
EECLK
EESIO
TMOT
+3.3V6
REGSEN2
GND
GND
+3.3V6
REGSEN2
GND
RS2
PSFM
FANRN
+24V1
DH *1
DHEATER
+24V1
TONER FULL DETECT ASSY
WTS
+3.3V12
WTLEDN
WTSENS
+3.3V6
MPPS
+3.3V8
GND
MPFSENS
SBM
OUTA1
OUTA3
OUTB1
OUTB3
R-LPWB
YC3
YC7
YC8
YC9
YC10
YC11
YC12
YC13
YC1
YC2
YC4
YC5
YC6
+24V6
TSENS
ERASERN
EECLK
EESIO
TMOT
+3.3V6
GND
LFANN
+24V4
LSUFM
EECLK
GND
EESIO
ERASER
+3.3V6
TSENS
SBMDIR
WTSENS
SBMENBLM
WTLED
SBMSTEP
MPFSENS
SBMMODE
+3.3V2
TMOT
LFANN
+24V6
GND
GND
+24V4
INLET
LIVE
GND
NEUTRAL
PSPWB
YC1
YC2
YC3
+24V1
+24V1
+24V1
+24V1
GND
GND
GND
GND
PSLEEPN
RELAY
ZCROSSN
HEAT1REM
EPWB
YC1
YC10
YC9
YC2
YC3
E
D
YC13
YC12
YC8
YC7
YC6
YC5
YC4
NEUTRAL
LIVE
FUTS1
FUH1
FUSER UNIT
+3.3V10
GND
PAPFULN
EFS *2
MPFSOLN
+24V3
MPSOL
CAS1
CASSET
CAS2
CAS3
CSSW
+24V2
+24V1
ILSW
REGCLN
+24V3
RCL
FEEDCLN
+24V3
PFCL
DLPCLN
+24V3
DEVSCL
+24V3
GND
MMOTONN
MMOTCLKN
MMOTRDYN
MMOTCW
MM

*1: 110V only
*2: 40ppm (with Network) model only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PM
APCPWB
YC2
YC1
PDPWB
GND
PDN
+3.3V6
+24V6
GND
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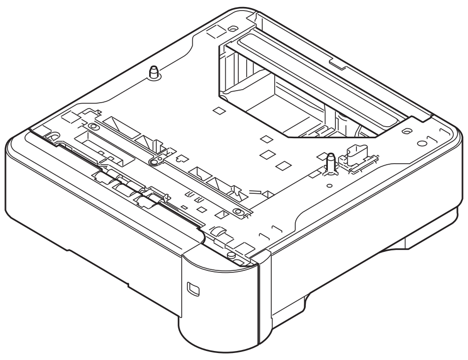
PLGRDYN
POLCLK
+5V5
VDATA1P
VDATA1N
VDATA2P
VDATA2N
SAMPLEN1
SAMPLEN2
OUTPEN
VCONT1
VCONT2
GND
PDN
+3.3V6
OPPWB
LCD
TEMS
HUS
+5V5
BLIGHT
BLPWB
PSSW
+3.3V6
FPRSTN
PSC_OK_KEY
C2P_BUZCON
AIRTEMP
C2P_LCDCON
+5V5
P2C_SDAT
AIRWET
C2P_SDAT
WETCLK
LED
FG
GND
GND
POWERSW
YC14
YC15
YC16
YC17
YC18
E
E
D
+24V6
+5V5
+24V3
+5V3
USB HOST
EPWB
YC20
YC2
+5V2 A1 A20
+5V2 B2 B20
+5V2 A2 A19
+5V2 B2 B19
GND A3 A18
GND A3 B18
GND A4 A17
UTADAN B4 B17
VBUS A5 A16
UDATAP B5 B16
GND A6 A15
GND B6 B15
C2P_BUZCON A7 A14
FPRSTN B7 B14
C2P_LCDCON A8 A13
P2C_PKEY B8 B13
C2P_SDAT A9 A12
P2C_SDAT B9 B12
SAMPLE1 A10 A11
SAMPLE2 B10 B11
GND A11 A10
PDN B11 B10
VDATAP2 A12 A9
VDATA1P B12 B9
VDATA2N A13 A8
VDATA1N B13 B8
GND A14 A7
PLGCLK B14 B7
E2C_IRN A15 A6
E2C_SDAT B15 B6
C2E_SDAT A16 A5
C2E_SCKN B16 B5
E2C_SBSY A17 A4
E2C_SDIR B17 B4
GND A18 A3
VSYNC B18 B3
GND A19 A2
C2E_OFFRDY B19 B2
E2C_INT A20 A1
C2E_INT B20 B1
MPWB
USB DEVICE
USB HOST
ETHER
eKUIO
DDR2 SOCKET
SD CARD
+24V1
+3.3V2
F
E
YC22
YC21
YC26
YC19
+24V5
OPSDO
OPSDI
OPCLK
OPRDYN
+3.3V7
GND
OPSEL2
OPSEL1
OPSEL0
OPPAUSEN
GND
PF (option)
PF-320/PF-315 plus
TH2
TH1
GND
REARFANN
+24V4
FUTHRPWB
YC3
YC5
YC4
YC2
YC1
EXITSENSN
GND
+3.3V13
+24V4
REARFANN
DEV FM
GND
TH2
GND
TH1
FUTH2 (Center)
FUTH1 (Edge)
ES
FUSER UNIT
+24V3
TCNT
TRREM
SCNT
+3.3V6
DUJAMSEN2N
REGSENSN
PAPERSEN1N
PAPERSEN2N
BACNT
BDCNT
HVCLK
MDCCNT
MACCNT
MHVCLK
MISENS
GND
ENVSENSN
YC101
HVPWB
YC102
RS1
PS1
PS2
DUS2
+3.3V14
GND
ENVSENSN
FUPRS

500 sheets paper feeder Installation Guide

PF-320

Installation Guide
Installationsanleitung
Guide d'installation
Guida all'installazione
Guía de instalación

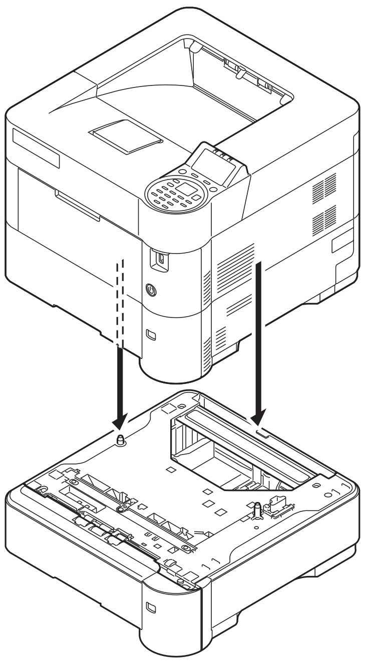
303NY5631002



For Canada:

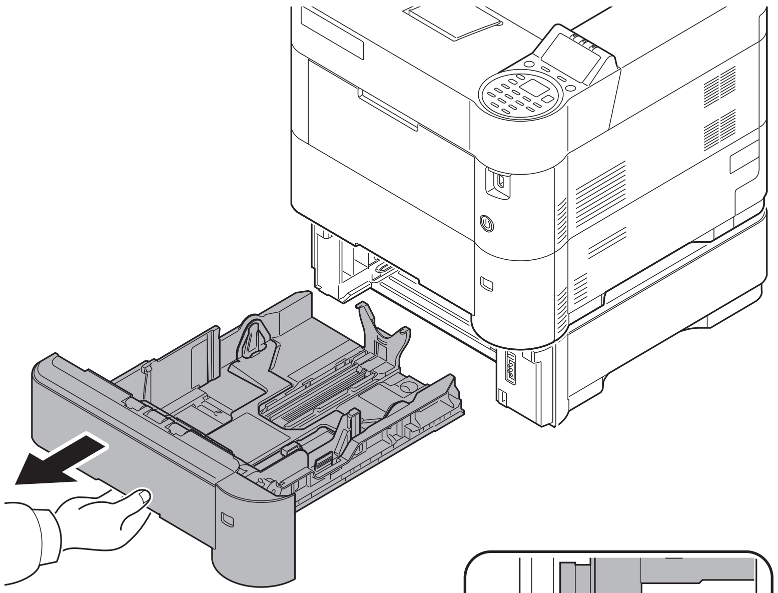
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Installation of PF-320
Installation von PF-320
Installation de PF-320
Installazione di PF-320
Instalación de PF-320
的安装



Adjustment of paper size
Justage des Papierformats
Ajustement de format papier
Registrazione del formato carta
Ajuste del tamaño del papel
纸张大小的调整
용지 크기의 조정
用紙サイズの調整

1



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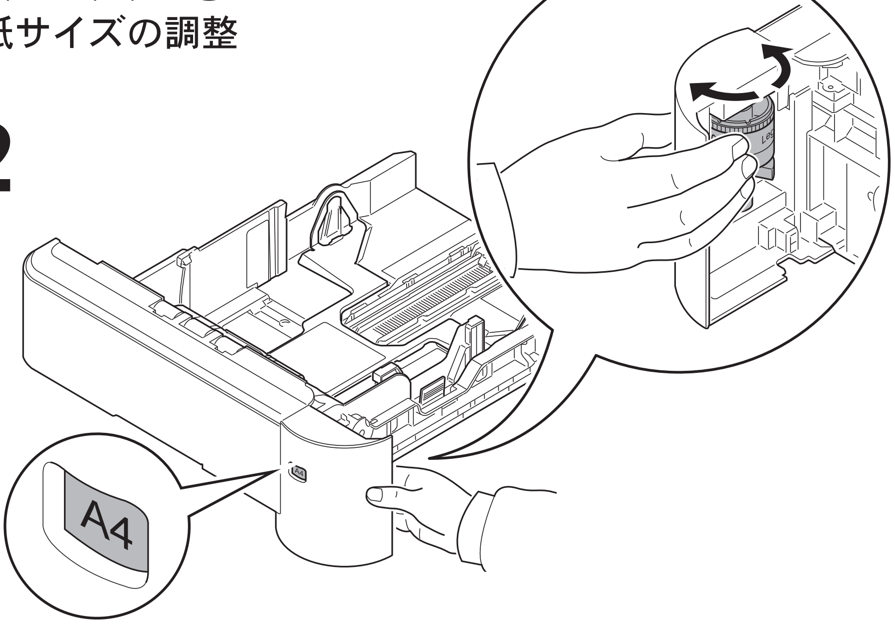

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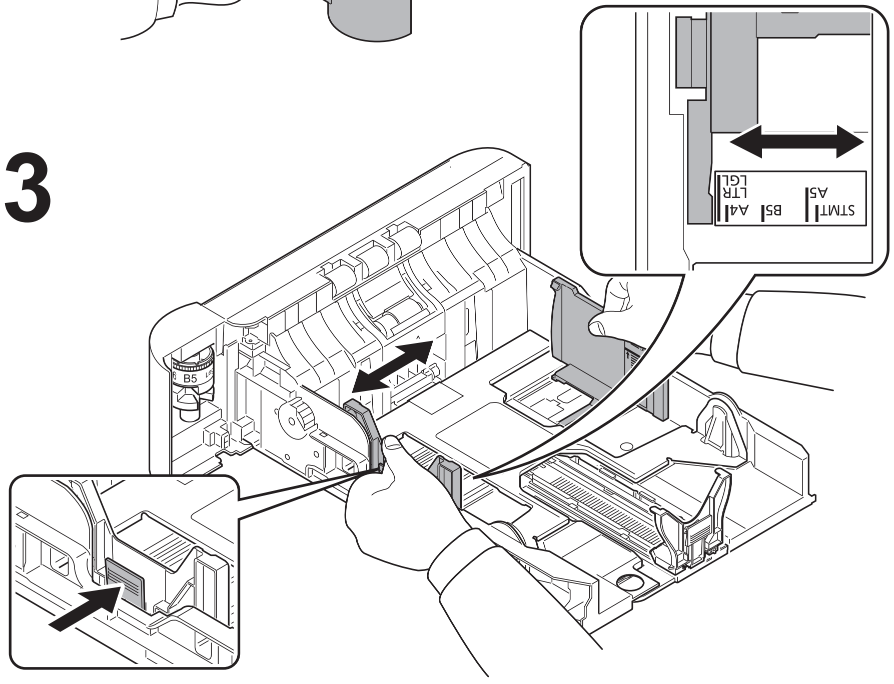

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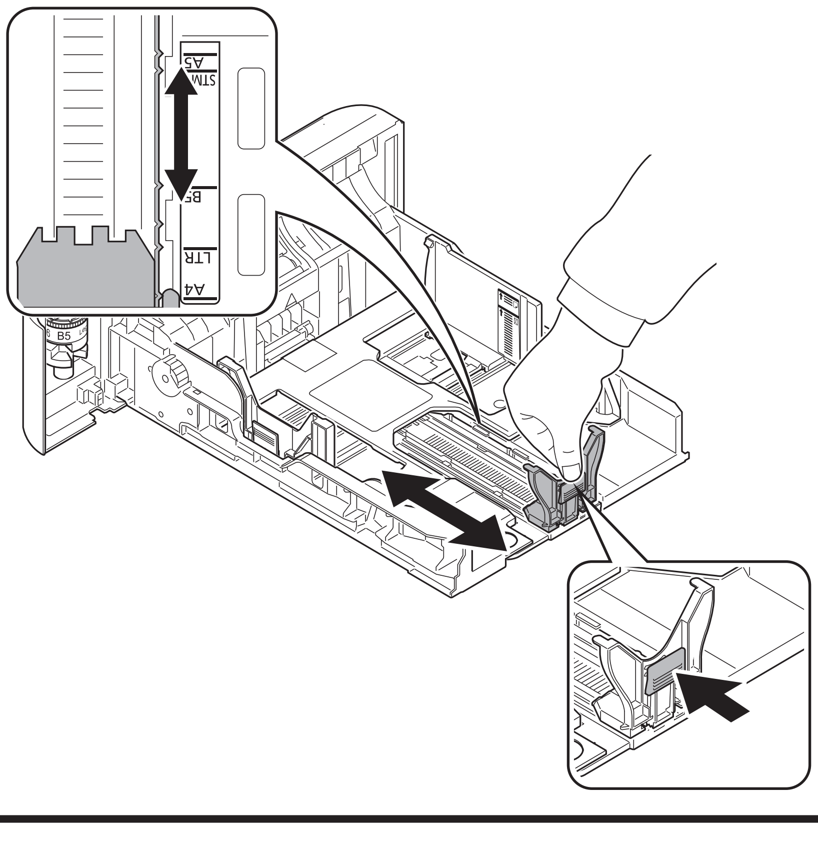

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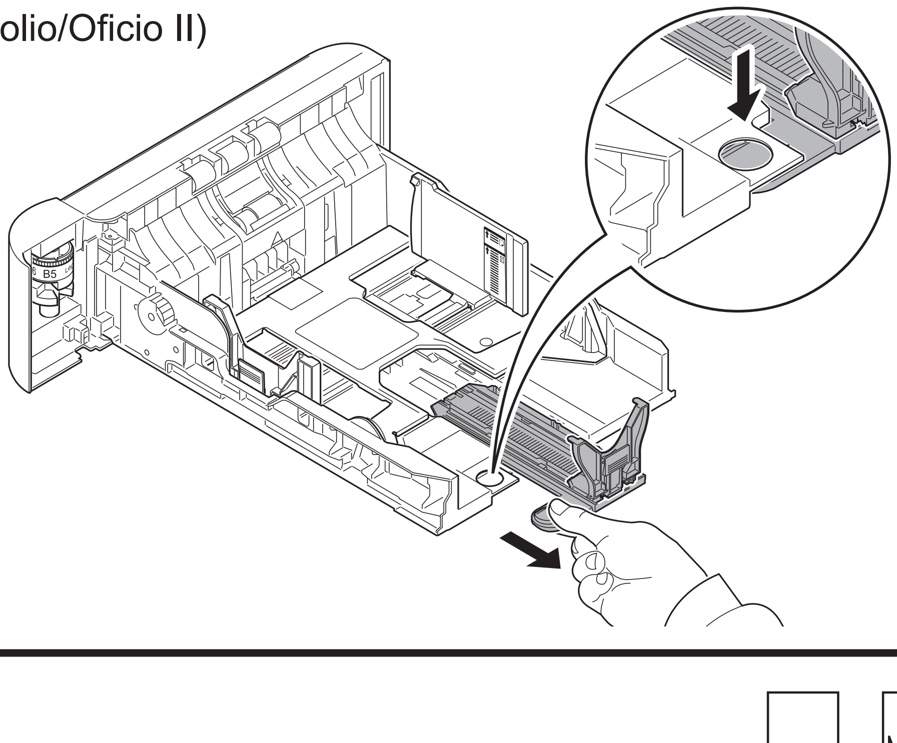
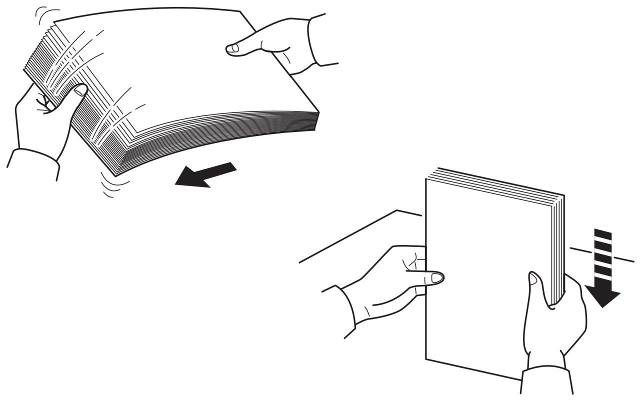


2

Loading paper

Ladenpapier
Papier de chargement
Carta da caricamento
Papel del cargamento
装纸
용지 적재
用紙のセット

5



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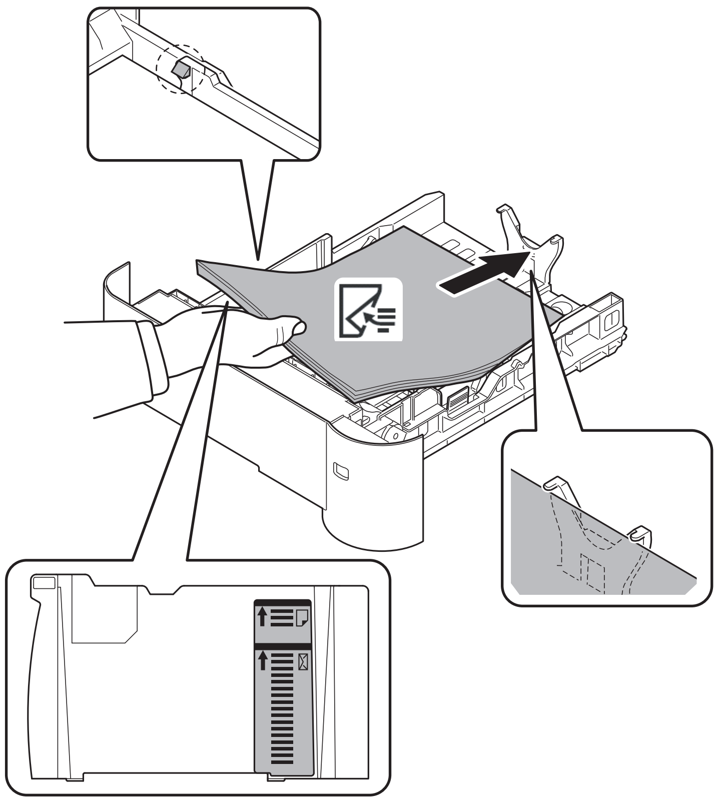

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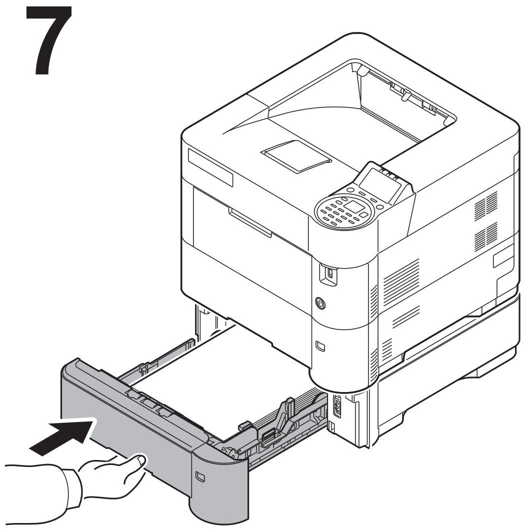
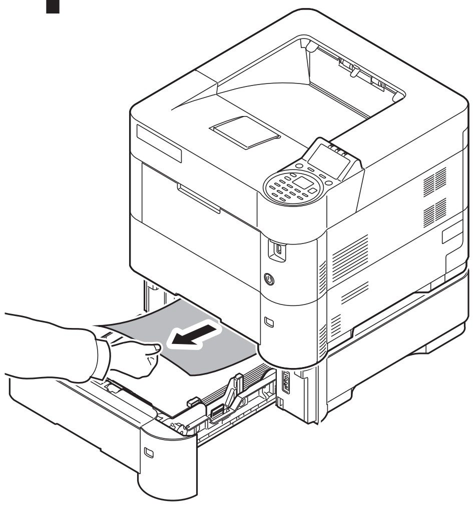


Removing Paper Jams

Entfernen von Papierstaus
Solution pour les bourrages papier
Rimozione degli inceppamenti carta
Eliminación de los atascos de papel
取出卡纸
종이 잼 제거
紙づまりの処理

1



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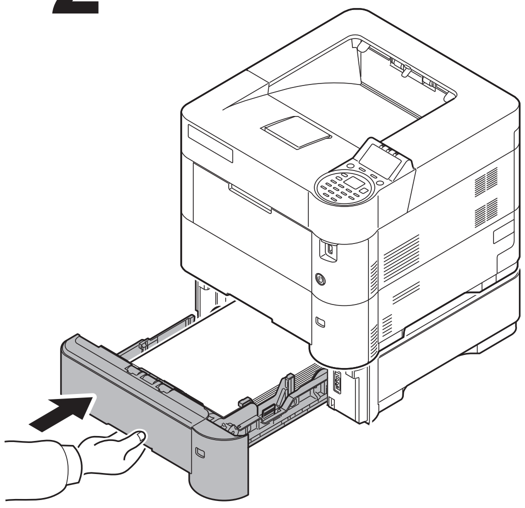
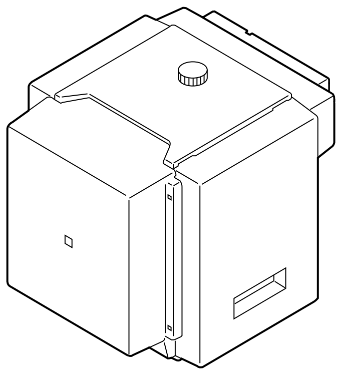


2000 sheets bulk paper feeder Installation Guide

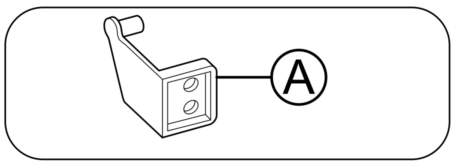
PF-315+

Installation Guide
Installationsanleitung
Guide d'installation
Guida all'installazione
Guía de instalación

303KF5632002



Installation of PF-315+
Installation von PF-315+
Installation de PF-315+
Installazione di PF-315+
Instalación de PF-315+



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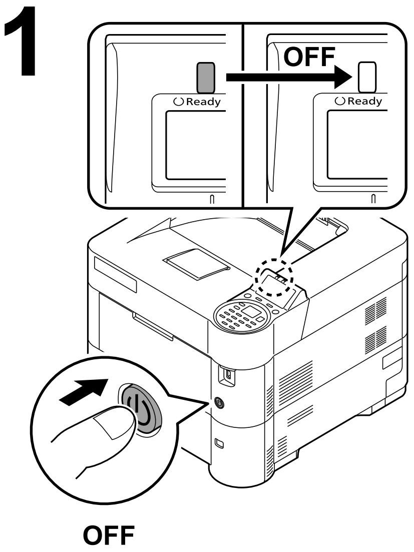
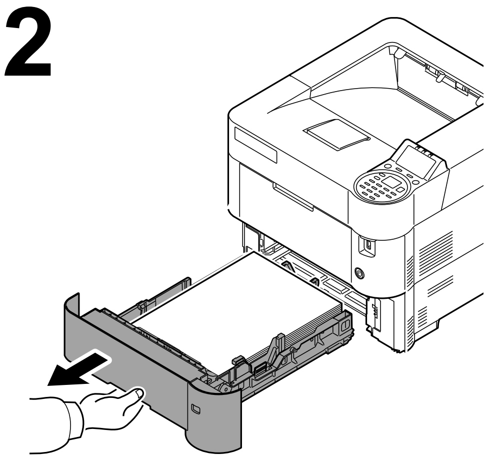

OFF
Ready
Ready
OFF

2



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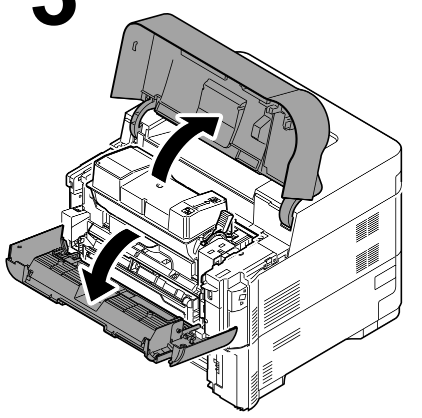

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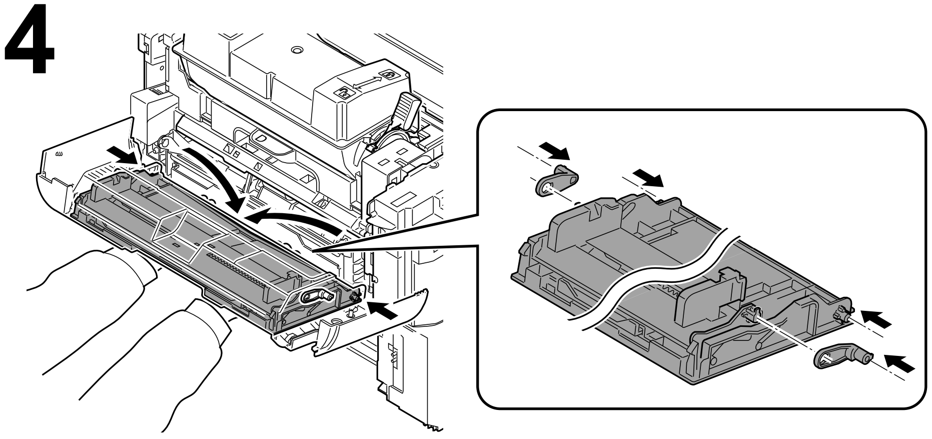

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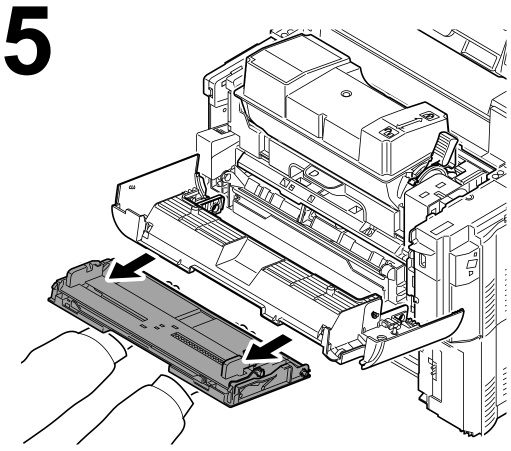

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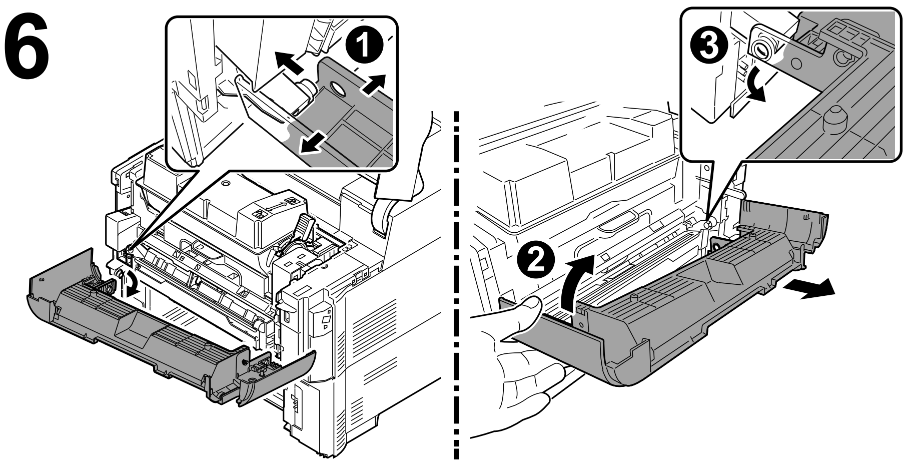

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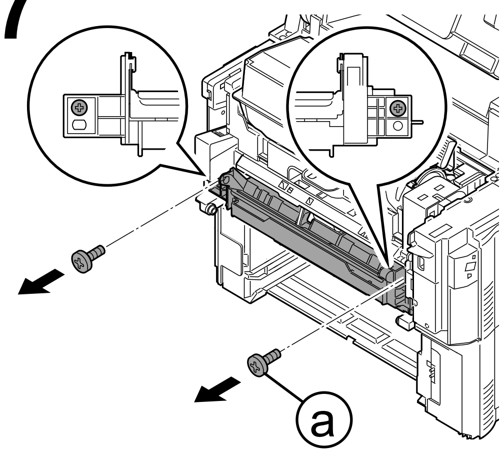

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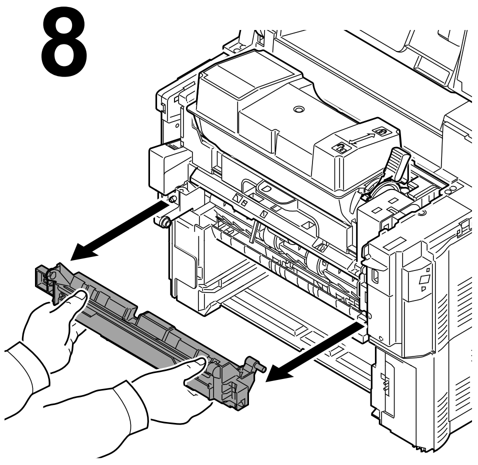

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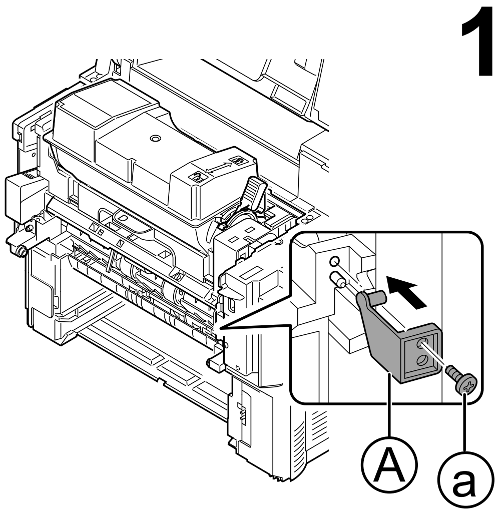

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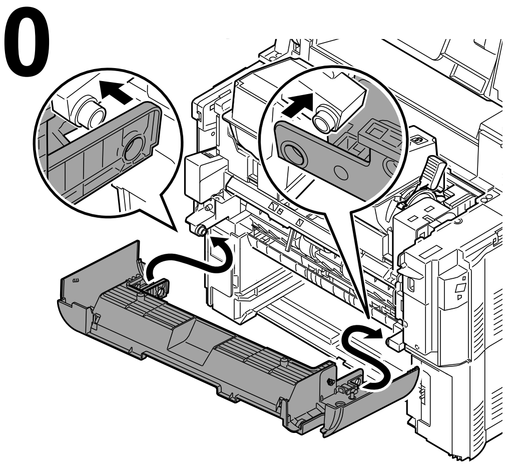

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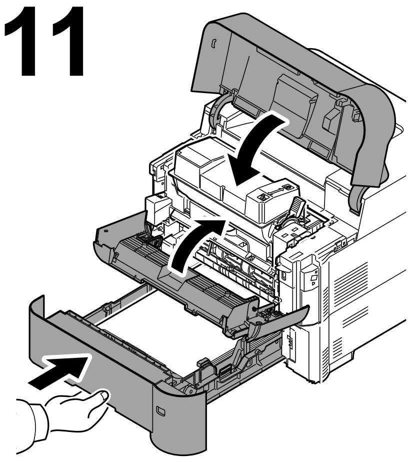

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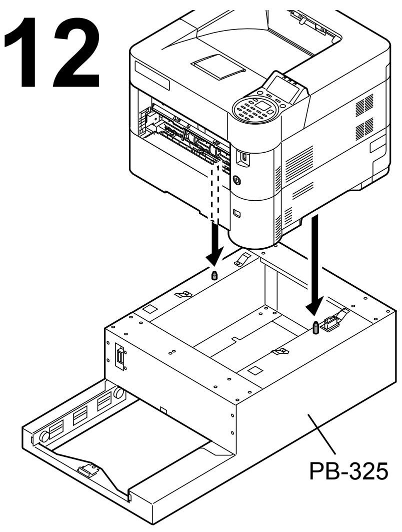

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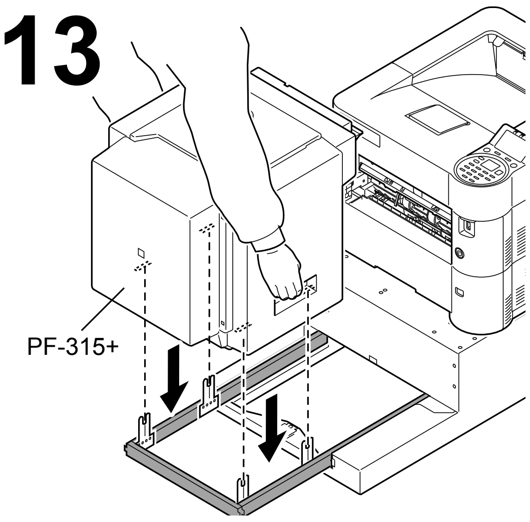

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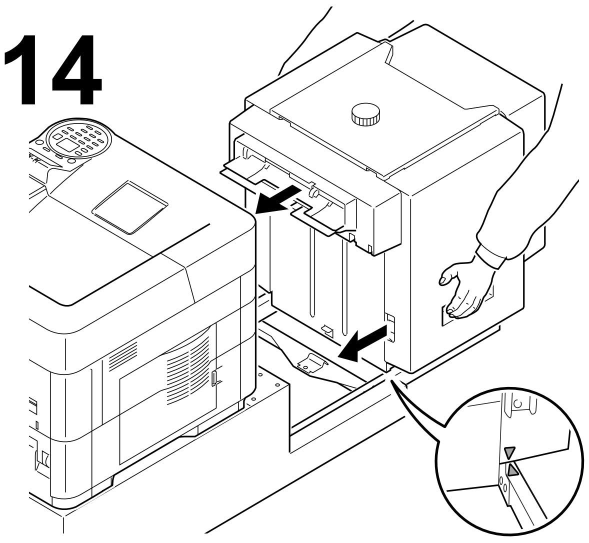

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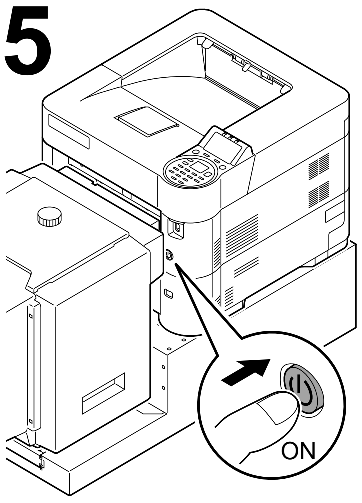
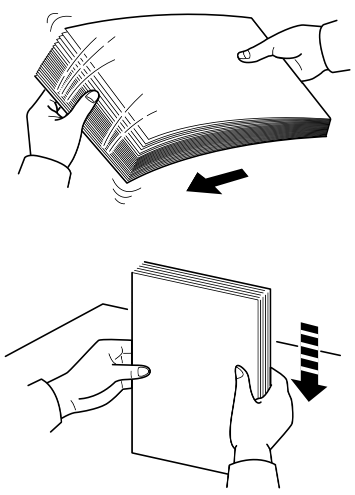


Loading paper
Ladenpapier
Papier de chargement
Carta da caricamento
Papel del cargamento
装纸
용지 적재
用紙のセット

1



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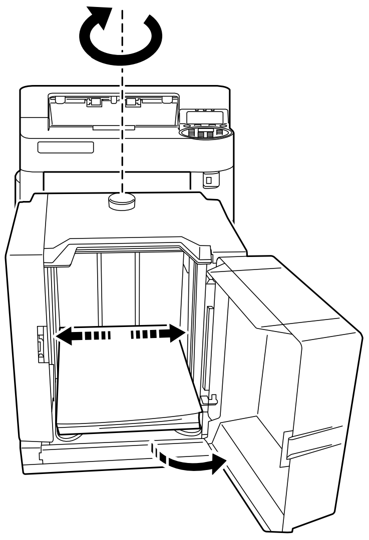

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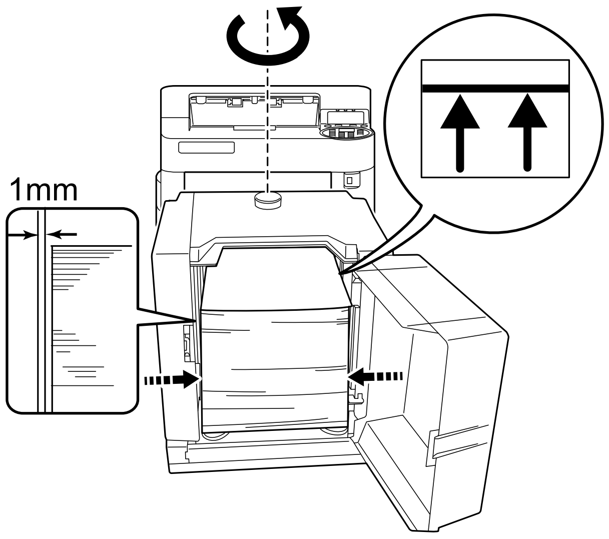
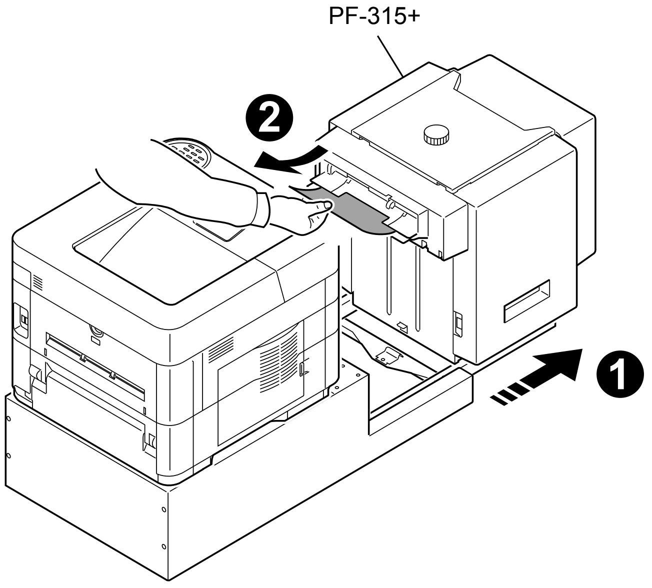
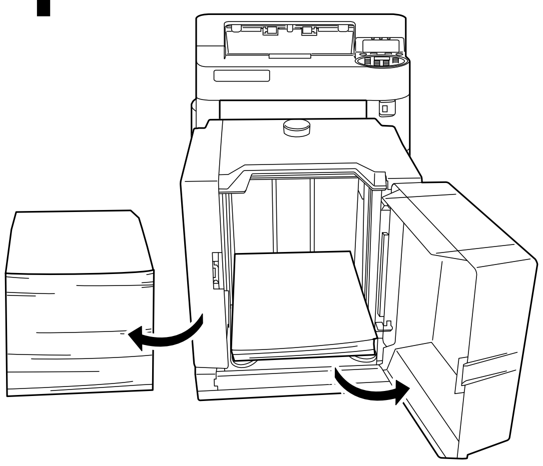


Removing Paper Jams
Entfernen von Papierstaus
Solution pour les bourrages papier
Rimozione degli inceppamenti carta
Eliminación de los atascos de papel
取出卡纸
종이 잼 제거
紙づまりの処理



1

Duplex unit
Duplex Einheit
Unité recto verso
Unità fronte/retro
Unidad dúplex
双面器
양면 장치
両面ユニット



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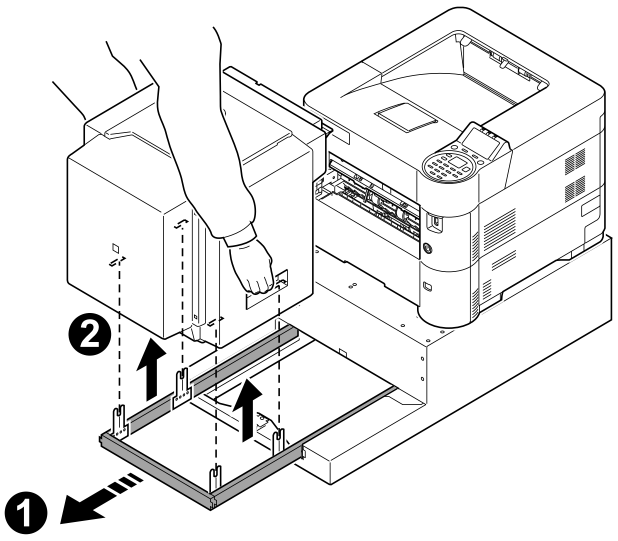

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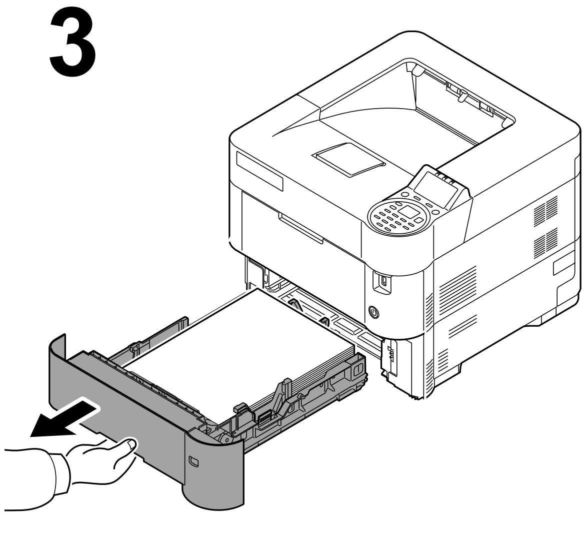

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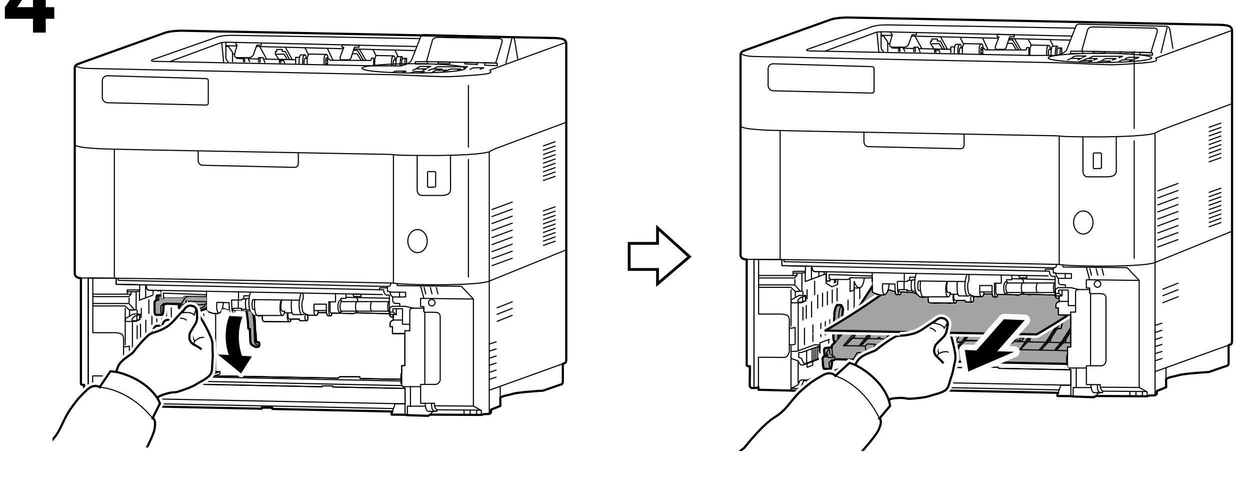
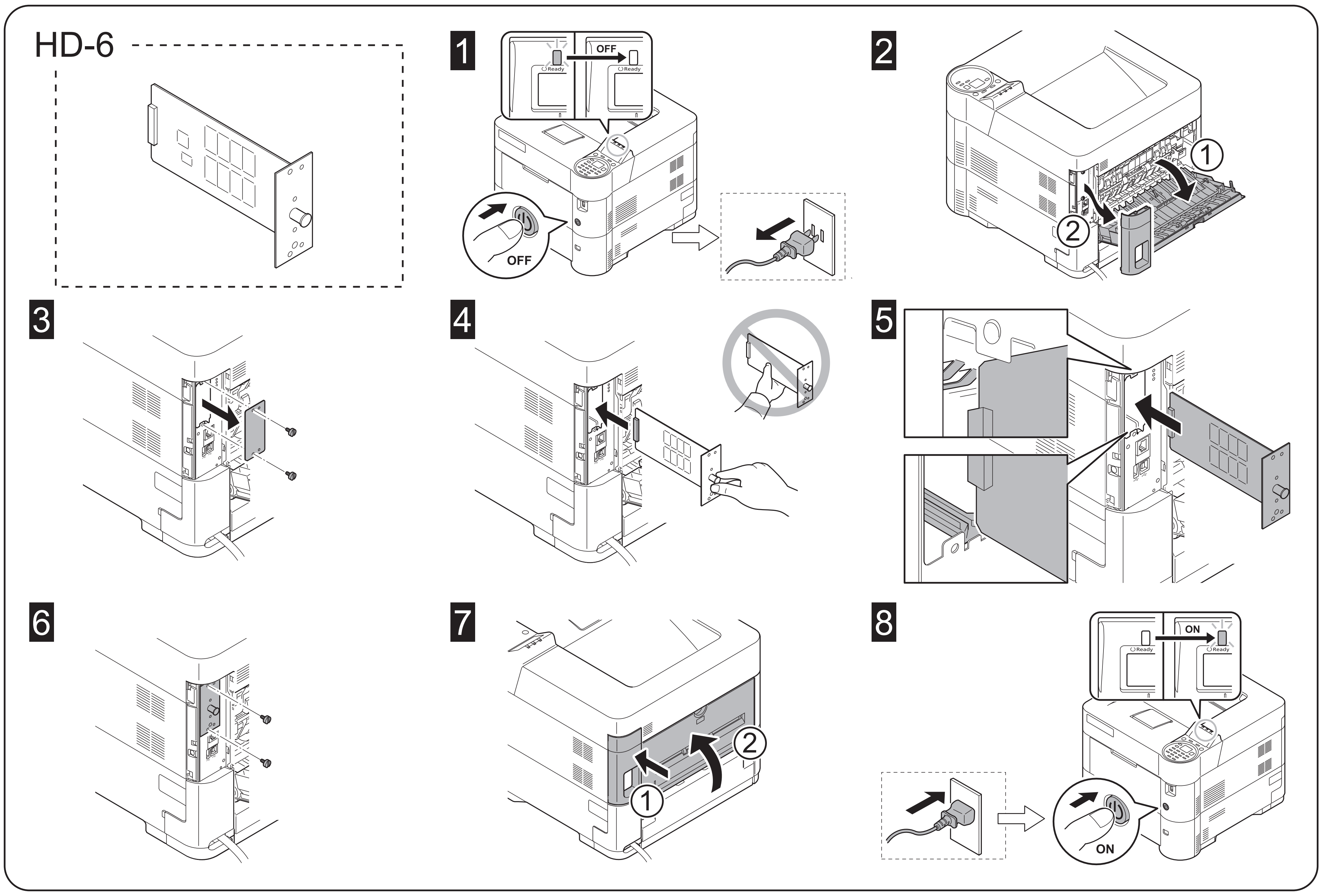


SSD (HD-6)
Installation Guide

305J45631001



English

Optional SSD HD-6
Installation Guide

Introduction

The HD-6 is an optional SSD for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method. This SSD can be installed in other models using the same installation procedure.

Packing List

HD-6	1
Installation Guide (this guide)	1

Precautions for Handling the SSD

When handling the SSD, adhere to the following precautions.

- The SSD is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the SSD from the bag.
- Never touch the SSD's connector section directly with hands.
- When holding the SSD, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the SSD

CAUTION

Before installing (or removing) the SSD, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Formatting the SSD

After installing the SSD in the machine, the SSD must to be formatted before used. Formatting is performed from the machine's operation panel.
Refer to the Operation Guide for the formatting of the SSD.

Verifying Installation of the SSD

To verify that the SSD has been correctly installed, try to print out the status page.
Refer to the Operation Guide for the method for printing a status page.

Français

SSD HD-6 en option
Guide d'installation

Introduction

Le HD-6 est un SSD optionnel destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation. Ce SSD peut être installé dans d'autres modèles en utilisant la même procédure d'installation.

Contenu de l'emballage

HD-6	1
Guide d'installation (ce manuel)	1

Précautions de manipulation du SSD

Lorsque vous manipulez le SSD, observez les précautions suivantes.

- Le SSD est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique.Vous éviterez ainsi d'endommager le SSD.
- Ne touchez jamais directement la partie du connecteur du SSD avec les mains.
- Lorsque vous tenez le SSD, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du SSD

ATTENTION

Avant d'installer (ou de retirer) le SSD, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Formatage du SSD

Après avoir installé le SSD dans l'imprimante, vous devez le formater pour pouvoir l'utiliser. Le formatage s'effectue depuis le panneau de commande de l'imprimante.
Consultez le manuel d'utilisation pour formater le SSD.

Vérification de l'installation du SSD

Pour vous assurer que le SSD a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.
Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

Español

SSD HD-6 opcional
Guía de instalación

Introducción

HD-6 es una SSD opcional para utilizar con la copiadora e impresora de hojas. Lea detenidamente esta Guía de instalación para entender los métodos de instalación y operación correctos. Esta SSD puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

HD-6	1
Guía de instalación (este folleto)	1

Precauciones para el manejo de la SSD

Cuando maneje la SSD, tenga en cuenta las siguientes precauciones.

- La SSD se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar la SSD de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector de la SSD directamente con las manos.
- Cuando sostenga la SSD, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación de la SSD

PRECAUCIÓN

Antes de instalar (o desmontar) la SSD, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Inicialización de la SSD (formateo)

Después de instalar la SSD en la impresora, deberá inicializarla (formatearla) antes de utilizarla. La inicialización se realiza desde el panel de control de la impresora.
Consulte la Guía de uso para inicializar (formatear) la SSD.

Verificación de la instalación de la SSD

Para verificar que la SSD ha sido instalada correctamente, trate de imprimir la página de estado de la impresora.
Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Deutsch

Optionale SSD HD-6 Installationsanleitung

Einführung
Die HD-6 ist eine optionale SSD zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren. Diese SSD kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

HD-6	1
Installationsanleitung (diese Anleitung)	1

Vorsichtshinweise beim Umgang mit der SSD
Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit der SSD.

- Die SSD wird in einem Antistatikbeutel geliefert. Um eine Beschädigung der SSD zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie die SSD aus der Verpackung entfernen.
- Berühren Sie auf keinen Fall die Steckleiste der SSD mit bloßen Händen.
- Achten Sie beim Halten der SSD darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie die SSD stets an den Kanten der Platine.
- Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation der SSD
VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) der SSD unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Formatierung der SSD
Nach der Installation der SSD im Drucker muss diese vor der Inbetriebnahme formatiert werden. Die Formatierung wird am Bedienfeld des Druckers ausgeführt. Die Vorgehensweise für die Formatierung der SSD finden Sie in der Bedienungsanleitung.

Überprüfung der Installation der SSD
Um eine korrekte Installation der SSD zu überprüfen, drucken Sie die Statusseite aus.
Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Italiano

SSD HD-6 opzionale Guida all’installazione

Introduzione
HD-6 è un’unità a stato solido (SSD) opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all’installazione per comprendere il corretto metodo di installazione. Questa SSD può essere installata in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

HD-6	1
Guida all’installazione (la presente guida)	1

Precauzioni d'uso per la SSD
Durante l’utilizzo della SSD, adottare le precauzioni che seguono.

- La SSD è spedita in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l’elettricità statica prima di rimuovere la SSD dalla custodia.
- Non toccare la sezione del connettore della SSD direttamente con le mani.
- Nell’afferrare la SSD, evitare il contatto con la superficie della scheda a circuito. Afferrarla alle estremità.
- Non esercitare una forza eccessiva durante l’installazione.

Installazione della SSD
ATTENZIONE:

prima di installare (o di rimuovere) la SSD, assicurarsi di aver spento l’alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Formattazione della SSD
Dopo aver installato la SSD nella macchina, è necessario formattarla prima dell’utilizzo. La formattazione può essere eseguita dal pannello operativo della macchina.
Per la formattazione della SSD, consultare la Guida alle funzioni.

Verifica dell’installazione della SSD
Per verificare che la SSD sia stata installata correttamente, stampare la pagina di stato.
Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni.

简体中文

选装 SSD HD-6 安装手册

前言
HD-6 是一款适用于 MFP 和页式打印机的选装 SSD。为了解正确的安装方法，请仔细通读本《安装手册》。本 SSD 可通过同样的安装步骤安装到其他机型上去。

包装内容列表

HD-6	1
安装手册（本手册）	1

使用本 SSD 的注意事项
使用本 SSD 时，请遵守以下注意事项。

- 本 SSD 被包装在防静电袋中。将 SSD 从包装袋中取出之前，请短暂触摸大件金属物体以消除静电，以免造成损坏。
- 请勿直接用手触摸 SSD 的连接器部分。
- 拿握 SSD 时，请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。

安装本 SSD
注意：

安装（或拆卸）本 SSD 前，请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

格式化本 SSD
将 SSD 安装入机器后，必须在使用之前对 SSD 进行格式化。通过机器的操作面板来执行格式化操作。
有关格式化 SSD 的相关信息，请参阅《操作手册》。

确认本 SSD 安装正确
为确认本 SSD 已经正确安装，请尝试打印状态页。
有关打印状态页的方法，请参阅《操作手册》。

동봉물

옵션 SSD HD-6 토너 설치 안내서

소개
HD-6는 MFP 및 페이지 프린터에 사용되는 옵션 SSD입니다.
본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다.
본 SSD는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

HD-6	1
토너 설치 안내서 (본 안내서)	1

SSD 취급 시 주의사항
SSD 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- SSD는 정전기 방지 봉투에 포장되어 있습니다. SSD를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- SSD 연결부를 직접 손으로 만지지 마십시오.
- SSD를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

SSD 설치
주의사항

SSD를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

SSD 포맷
SSD를 기기에 설치한 뒤, 사용하기 전에 반드시 SSD을 포맷해야 합니다. 기기의 조작 패널에서 포맷을 수행할 수 있습니다. SSD 포맷에 관한 자세한 내용은 사용설명서를 참고하시기 바랍니다.

SSD 설치 확인
SSD가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

日本語

オプションSSD HD-6 インストールガイド

はじめに
HD-6 は京セラ複合機およびプリンター用 SSD ユニットです。本書をよくお読みいただき、正しく装着してください。なお、本オプションはその他の機種でも同様の手順で装着できます。

梱包内容の確認

HD-6 本体	1
インストールガイド(本書)	1

取扱い上の注意
本オプションの取り扱いには、以下のことにご注意ください。

- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念のため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください。
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- 装着時は無理な力を加えないでください。

SSD ユニットの装着
注意

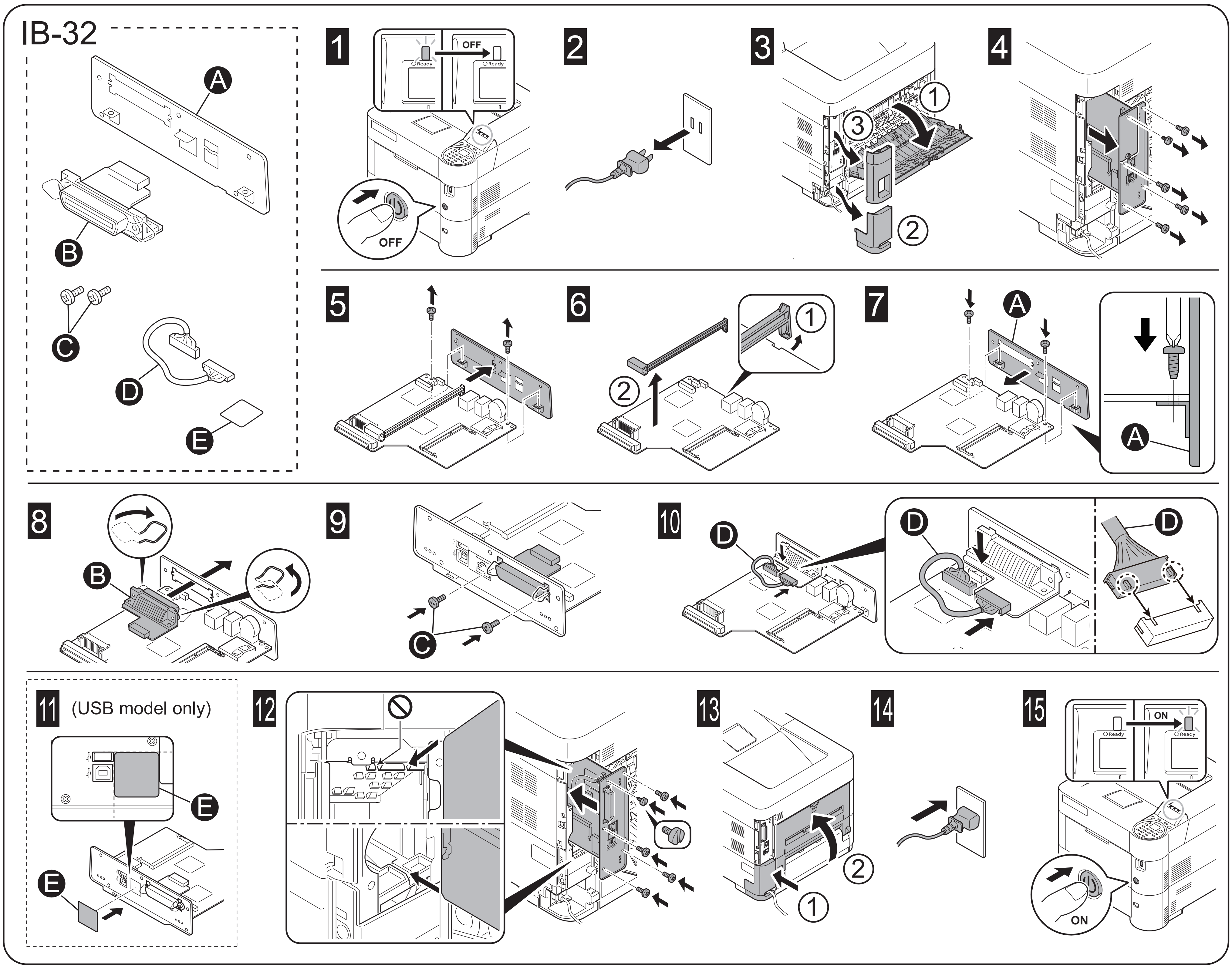
本オプションの装着（または取り外し）は、複合機またはプリンターの電源を切り、電源プラグをコンセントから抜いた状態で行ってください。

SSD のフォーマット
本オプション装着後は、使用する前に操作パネルからフォーマットをする必要があります。
SSD のフォーマットは、使用説明書を参照してください。

装着の確認
ステータスページを印刷して、本オプションが正しく装着されたかを確認します。
ステータスページの印刷方法は、使用説明書を参照してください。

IEEE1284 Interface
Installation Guide

303N55631001



English

Optional Parallel Interface Kit IB-32
Installation Guide

Introduction

The IB-32 is an optional parallel interface kit for use with the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method.
This parallel interface kit can be installed in other models using the same installation procedure.

Packing List

IB-32	1
Plate	1
Screw	2
Relay cable	1
Seal	1
Installation Guide (this guide)	1

Precautions for Handling the Parallel Interface Kit

When handling the parallel interface kit, adhere to the following precautions.

- The parallel interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the parallel interface kit from the bag.
- Never touch the parallel interface kit's connector section directly with hands.
- When holding the parallel interface kit, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the Parallel Interface Kit

CAUTION

Before installing (or removing) the parallel interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Verifying Installation of the Parallel Interface Kit

To verify that the parallel interface kit has been correctly installed, try to print out the status page.
Refer to the Operation Guide for the method for printing a status page.

Français

Kit d'interface parallèle IB-32 en option
Guide d'installation

Introduction

L'IB-32 est un kit d'interface parallèle en option destiné à être utilisé avec les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation.
Ce kit d'interface parallèle peut être installé dans d'autres modèles à l'aide de la même procédure d'installation.

Contenu de l'emballage

IB-32	1
Plaque	1
Vis	2
Câble de relais	1
Obturateur	1
Guide d'installation (ce manuel)	1

Précautions de manipulation du kit d'interface parallèle

Lorsque vous manipulez le kit d'interface parallèle, observez les précautions suivantes.

- Le kit d'interface parallèle est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique.Vous éviterez ainsi d'endommager le kit d'interface parallèle.
- Ne touchez jamais directement la partie du connecteur du kit d'interface parallèle avec les mains.
- Lorsque vous tenez le kit d'interface parallèle, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface parallèle

ATTENTION

Avant d'installer (ou de retirer) le kit d'interface parallèle, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Vérification de l'installation du kit d'interface parallèle

Pour vous assurer que le kit d'interface parallèle a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.
Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

Español

Kit de interfaz en paralelo IB-32 opcional
Guía de instalación

Introducción

El IB-32 es un kit de interfaz en paralelo opcional para utilizar con la impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos.
Este kit de interfaz en paralelo puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

IB-32	1
Placa	1
Tornillo	2
Cable de relé	1
Sello	1
Guía de instalación (este folleto)	1

Precauciones para el manejo del kit de interfaz en paralelo

Cuando maneje el kit de interfaz en paralelo, tenga en cuenta las siguientes precauciones.

- El kit de interfaz en paralelo se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz en paralelo de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector del kit de interfaz en paralelo directamente con las manos.
- Cuando sostenga el kit de interfaz en paralelo, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación del kit de interfaz en paralelo

PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz en paralelo, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Verificación de la instalación del kit de interfaz en paralelo

Para verificar que el kit de interfaz en paralelo ha sido instalado correctamente, trate de imprimir la página de estado de la impresora.
Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Deutsch

Optionales Parallel Interface Kit IB-32
Installationsanleitung

Einführung

Das IB-32 ist ein optionales Parallel Interface Kit zur Verwendung mit Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren.

Dieses Parallel Interface Kit kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-32	1
Platte	1
Schraube	2
Relaiskabel	1
Dichtung	1
Installationsanleitung (diese Anleitung)	1

Vorsichtsmaßnahmen bei der Handhabung des Parallel Interface Kits

Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Parallel Interface Kit.

- Das Parallel Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie das Parallel Interface Kit aus der Verpackung entfernen.
- Berühren Sie auf keinen Fall die Steckleiste des Parallel Interface Kits mit bloßen Händen.
- Achten Sie beim Halten des Parallel Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Parallel Interface Kit stets an den Kanten der Platine.
- Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Parallel Interface Kits

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Parallel Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Parallel Interface Kits

Um eine korrekte Installation des Parallel Interface Kits zu überprüfen, drucken Sie die Statusseite aus.

Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Italiano

Kit interfaccia parallela IB-32 opzionale
Guida all’installazione

Introduzione

IB-32 è un kit interfaccia parallela opzionale per utilizzi con stampanti a pagine. Si prega di leggere attentamente la presente Guida all’installazione per comprendere il corretto metodo di installazione.

Questo kit interfaccia parallela può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-32	1
Vassoio	1
Vite	2
Cavo relè	1
Chiusura	1
Guida all’installazione (la presente guida)	1

Precauzioni d’uso del kit interfaccia parallela

Durante l’utilizzo del kit interfaccia parallela, adottare le precauzioni che seguono.

- Il kit interfaccia parallela è spedito in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l’elettricità statica prima di rimuovere il kit interfaccia parallela dalla custodia.
- Non toccare la sezione del connettore del kit interfaccia parallela direttamente con le mani.
- Nell’afferrare il kit interfaccia parallela, evitare il contatto con la superficie della scheda a circuito. Afferrarlo alle estremità.
- Non esercitare una forza eccessiva durante l’installazione.

Istallazione del kit interfaccia parallela

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia parallela, assicurarsi di aver spento l’alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Verifica dell’installazione del kit interfaccia parallela

Per verificare che il kit interfaccia parallela sia stato installato correttamente, stampare la pagina di stato.

Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni.

简体中文

选装并行接口套件 IB-32
安装手册

前言

IB-32 是一款适用于页式打印机的选装并行接口套件。为了解正确的安装方法，请仔细通读本《安装手册》。

本并行接口套件可通过同样的安装步骤安装到其他机型上去。

包装内容列表

IB-32	1
板	1
螺钉	2
继电器电缆	1
密封件	1
安装手册（本手册）	1

使用本并行接口套件的注意事项

使用本并行接口套件时，请遵守以下注意事项。

- 本并行接口套件被包装在防静电袋中。将并行接口套件从包装袋中取出之前，请短暂触摸大件金属物体以消除静电，以免造成损坏。
- 请勿直接用手触摸并行接口套件的连接器部分。
- 拿握并行接口套件时，请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。

安装本并行接口套件

注意：

安装（或拆卸）本并行接口套件前，请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

确认本并行接口套件安装正确

为确认本并行接口套件已经正确安装，请尝试打印状态页。

有关打印状态页的方法，请参阅《操作手册》。

동봉물

옵션 병렬 인터페이스 키트 IB-32
토너 설치 안내서

소개

IB-32는 페이지 프린터에 사용되는 옵션 병렬 인터페이스 키트입니다.

본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다.

본 병렬 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

IB-32	1
플레이트	1
나사	2
릴레이 케이블	1
실	1
토너 설치 안내서 (본 안내서)	1

병렬 인터페이스 키트 취급 시 주의사항

병렬 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- 병렬 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 병렬 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- 병렬 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 병렬 인터페이스 키트를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

병렬 인터페이스 키트 설치

주의사항

병렬 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

병렬 인터페이스 키트 설치 확인

병렬 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해 보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

日本語

オプションパラレルインターフェイスキット IB-32
インストールガイド

はじめに

IB-32 は京セラプリンター用パラレルインターフェイスキットです。本書をよくお読みいただき、正しく装着してください。なお、本オプションはその他の機種でも同様の手順で装着できます。

梱包内容の確認

IB-32 本体	1
プレート	1
ネジ	2
中継線	1
シール	1
インストールガイド(本書)	1

取扱い上の注意

本オプションの取り扱いには、以下のことにご注意ください。

- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念のため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください。
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- 装着時は無理な力を加えないでください。

パラレルインターフェイスキットの装着

注意

本オプションの装着（または取り外し）は、プリンターの電源を切り、電源プラグをコンセントから抜いた状態で行ってください。

装着の確認

ステータスページを印刷して、本オプションが正しく装着されたかを確認できます。

ステータスページの印刷方法は、使用説明書を参照してください。

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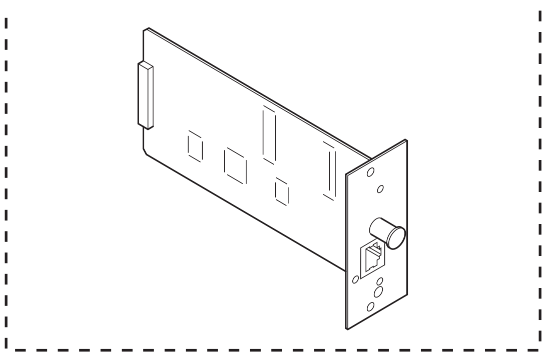
Network interface
Installation Guide

305JV5673001

IB-50



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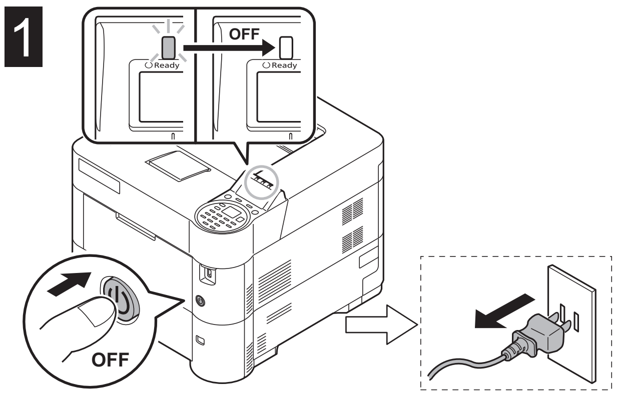

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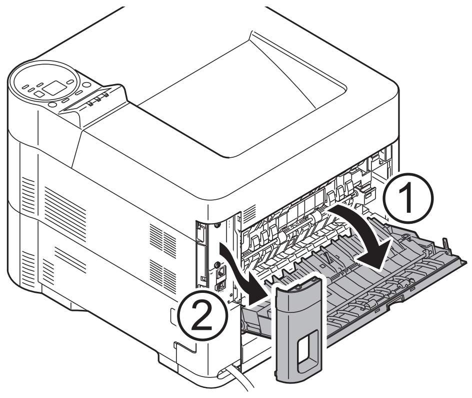

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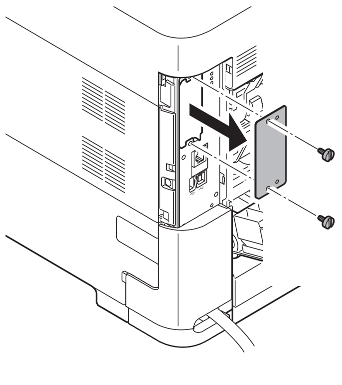

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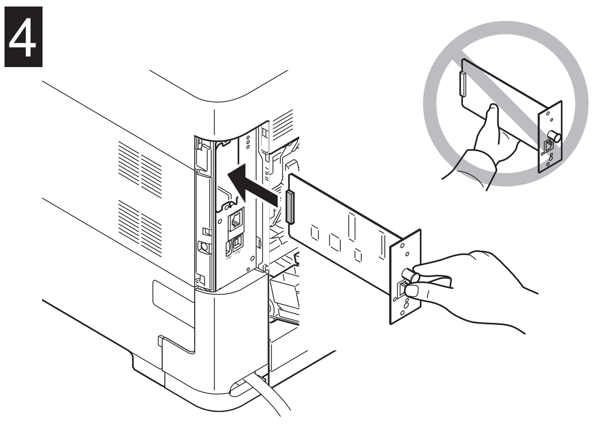
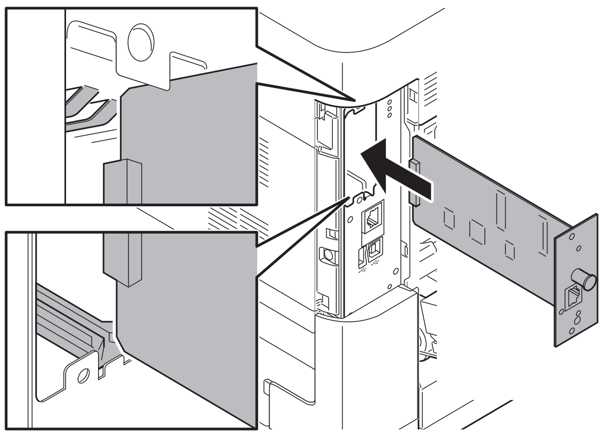
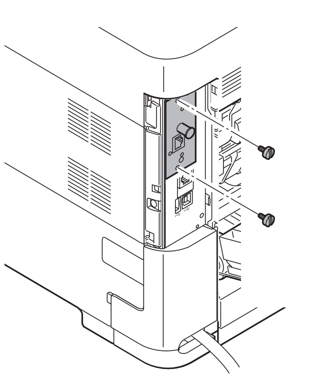


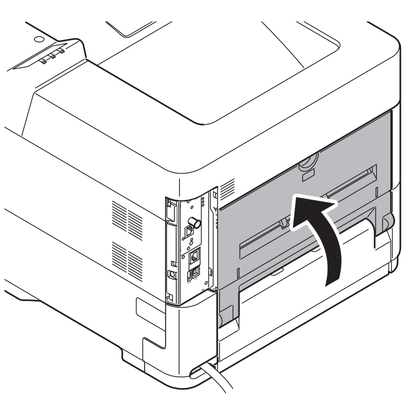
5



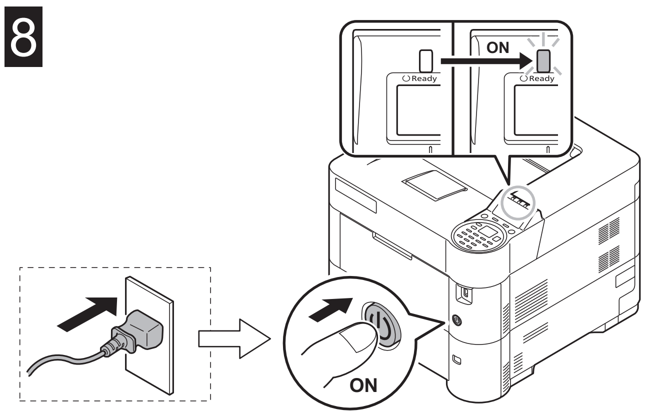
6



7



8



English

Optional Network Interface Kit IB-50 Installation Guide

Introduction

The IB-50 is an optional network interface kit for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method.
This network interface kit can be installed in other models using the same installation procedure.

Packing List

IB-50	1
Installation Guide (this guide)	1
Setup Guide	1
CD-ROM	1

Precautions for Handling the Network Interface Kit

When handling the network interface kit, adhere to the following precautions.

- The network interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the network interface kit from the bag.
- Never touch the network interface kit's connector section directly with hands.
- When holding the network interface kit, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the Network Interface Kit

CAUTION

Before installing (or removing) the network interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Verifying Installation of the Network Interface Kit

To verify that the network interface kit has been correctly installed, try to print out the status page.
Refer to the Operation Guide for the method for printing a status page.

Network settings

Refer to the Operation guide for the network settings.

Français

Kit d'interface réseau IB-50 en option Guide d'installation

Introduction

L'IB-50 est un kit d'interface réseau en option destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation.

Ce kit d'interface réseau peut être installé dans d'autres modèles à l'aide de la même procédure d'installation.

Contenu de l'emballage

IB-50	1
Guide d'installation (ce manuel)	1
Guide de mise en service	1
CD-ROM	1

Précautions de manipulation du kit d'interface réseau

Lorsque vous manipulez le kit d'interface réseau, observez les précautions suivantes.

- Le kit d'interface réseau est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique.Vous éviterez ainsi d'endommager le kit d'interface réseau.
- Ne touchez jamais directement la partie du connecteur du kit d'interface réseau avec les mains.
- Lorsque vous tenez le kit d'interface réseau, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface réseau

ATTENTION

Avant d'installer (ou de retirer) le kit d'interface réseau, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Vérification de l'installation du kit d'interface réseau

Pour vous assurer que le kit d'interface réseau a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.
Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

Réglages réseau

Pour connaître les réglages réseau, consultez le manuel d'utilisation.

Español

Kit de interfaz de red IB-50 opcional Guía de instalación

Introducción

El IB-50 es un kit de interfaz de red opcional para utilizar con la copiadora e impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos.

Este kit de interfaz de red puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

IB-50	1
Guía de instalación (este folleto)	1
Guía de configuración	1
CD-ROM	1

Precauciones para el manejo del kit de interfaz de red

Cuando maneje el kit de interfaz de red, tenga en cuenta las siguientes precauciones.

- El kit de interfaz de red se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz de red de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector del kit de interfaz de red directamente con las manos.
- Cuando sostenga el kit de interfaz de red, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación del kit de interfaz de red

PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz de red, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Verificación de la instalación del kit de interfaz de red

Para verificar que el kit de interfaz de red ha sido instalado correctamente, trate de imprimir la página de estado de la impresora.
Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Configuración de la red

Consulte la Guía de uso para obtener información sobre la configuración de la red.

Deutsch

Optionales Network Interface Kit IB-50 Installationsanleitung

Einführung

Das IB-50 ist ein optionales Network Interface Kit zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren.

Dieses Network Interface Kit kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-50	1
Installationsanleitung (diese Anleitung)	1
Einrichtungsleitfaden	1
CD-ROM	1

Vorsichtsmaßnahmen bei der Handhabung des Network Interface Kits

Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Network Interface Kit.

- Das Network Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung des Network Interface Kits zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie das Network Interface Kit aus der Verpackung entfernen.
- Berühren Sie auf keinen Fall die Steckleiste des Network Interface Kits mit bloßen Händen.
- Achten Sie beim Halten des Network Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Network Interface Kit stets an den Kanten der Platine.
- Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Network Interface Kits

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Network Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Network Interface Kits

Um eine korrekte Installation des Network Interface Kits zu überprüfen, drucken Sie die Statusseite aus.

Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Netzwerkeinstellungen

Die Netzwerkeinstellungen finden Sie in der Bedienungsanleitung.

Italiano

Kit interfaccia di rete IB-50 opzionale Guida all'installazione

Introduzione

IB-50 è un kit interfaccia di rete opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all'installazione per comprendere il corretto metodo di installazione.

Questo kit interfaccia di rete può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-50	1
Guida all'installazione (la presente guida)	1
Guida alla configurazione	1
CD-ROM	1

Precauzioni d'uso del kit interfaccia di rete

Durante l'utilizzo del kit interfaccia di rete, adottare le precauzioni che seguono.

- Il kit interfaccia di rete è spedito in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l'elettricità statica prima di rimuovere il kit interfaccia di rete dalla custodia.
- Non toccare la sezione del connettore del kit interfaccia di rete direttamente con le mani.
- Nell'afferrare il kit interfaccia di rete, evitare il contatto con la superficie della scheda a circuito. Afferrarlo alle estremità.
- Non esercitare una forza eccessiva durante l'installazione.

Istallazione del kit interfaccia di rete

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia di rete, assicurarsi di aver spento l'alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Verifica dell'installazione del kit interfaccia di rete

Per verificare che il kit interfaccia di rete sia stato installato correttamente, stampare la pagina di stato.

Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni.

Impostazioni di rete

Per le impostazioni di rete, consultare la Guida alle funzioni.

简体中文

选装网络接口套件 IB-50 安装手册

前言

IB-50 是一款适用于 MFP 和页式打印机的选装网络接口套件。为了解正确的安装方法，请仔细通读本《安装手册》。

本网络接口套件可通过同样的安装步骤安装到其他机型上去。

包装内容列表

IB-50	1
安装手册（本手册）	1
设置手册	1
CD-ROM	1

使用本网络接口套件的注意事项

使用本网络接口套件时，请遵守以下注意事项。

- 本网络接口套件被包装在防静电袋中。将网络接口套件从包装袋中取出之前，请短暂触摸大件金属物体以消除静电，以免造成损坏。
- 请勿直接用手触摸网络接口套件的连接器部分。
- 拿握网络接口套件时，请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。

安装本网络接口套件

注意：

安装（或拆卸）本网络接口套件前，请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

确认本网络接口套件安装正确

为确认本网络接口套件已经正确安装，请尝试打印状态页。

有关打印状态页的方法，请参阅《操作手册》。

网络设置

有关网络设置的相关信息，请参阅《操作手册》。

동봉물

옵션 네트워크 인터페이스 키트 IB-50 토너 설치 안내서

소개

IB-50은 MFP와 페이지 프린터에 사용되는 옵션 네트워크 인터페이스 키트입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 네트워크 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

IB-50	1
토너 설치 안내서 (본 안내서)	1
설정 안내서	1
CD-ROM	1

네트워크 인터페이스 키트 취급 시 주의사항

네트워크 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- 네트워크 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 네트워크 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- 네트워크 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 네트워크 인터페이스 키트를 잡을 때는, 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

네트워크 인터페이스 키트 설치

주의사항

네트워크 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

네트워크 인터페이스 키트 설치 확인

네트워크 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

네트워크 설정

네트워크 설정에 관련된 정보는 사용설명서를 참고하시기 바랍니다.

日本語

オプションネットワークインターフェイスキット IB-50 インストールガイド

はじめに

IB-50 は京セラ複合機およびプリンター用増設ネットワークです。本書をよくお読みいただき、正しく装着してください。なお、本オプションはその他の機種でも同様の手順で装着できます。

梱包内容の確認

IB-50 本体	1
インストールガイド(本書)	1
セットアップガイド	1
CD-ROM	1

取扱い上の注意

本オプションの取り扱いには、以下のことにご注意ください。

- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念のため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください。
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- 装着時は無理な力を加えないでください。

ネットワークインターフェイスキットの装着

注意

本オプションの装着（または取り外し）は、複合機またはプリンターの電源を切り、電源プラグをコンセントから抜いた状態で行ってください。

装着の確認

ステータスページを印刷して、本オプションが正しく装着されたかを確認できます。

ステータスページの印刷方法は、使用説明書を参照してください。

ネットワークの設定

ネットワークの設定については、使用説明書を参照してください。

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302JV56720

IB-50

Setup Guide
Guía de configuración
Manual de instalação
Guide d'installation
Setup-Leitfaden
Installatiehandleiding
Guida all'installazione
설치 안내서
设置向导
設定指南
セットアップガイド

(E) Thank you for purchasing the IB-50 Network Card (hereinafter "IB-50"). Follow the instructions in this setup guide to configure Windows environments for use with the IB-50. Simply follow the steps 1 to 2. For instructions on configuring other environments, refer to the online manual on the CD-ROM.

(S) Gracias por adquirir la tarjeta de red IB-50 (de aquí en adelante, "IB-50"). Siga las instrucciones de esta guía de configuración para configurar los entornos Windows para su uso con el IB-50. Simplemente siga los pasos 1 a 2. Para instrucciones sobre la configuración en otros entornos, consulte el manual en línea del CD-ROM.

(P) Obrigado por comprar a Placa de rede IB-50 (daqui em diante "IB-50"). Siga as instruções deste manual de instalação para configurar ambientes Windows para utilização com o IB-50. Efectue os procedimentos de 1 a 2. Para mais informações sobre como configurar outros ambientes, consulte o manual on-line de CD-ROM.

(F) Nous vous remercions d'avoir acheté la carte réseau IB-50 (ci-après dénommé "IB-50").
Veuillez suivre les instructions du présent guide d'installation pour configurer les environnements Windows pour l'utilisation avec l'IB-50. Suivez simplement les étapes 1 à 2. Pour les instructions relatives à la configuration des autres environnements, reportez-vous au manuel en ligne sur le CD-ROM.

(D) Vielen Dank, dass Sie sich für den Kauf der IB-50 Netzwerkkarte entschieden haben (im Weiteren als "IB-50" bezeichnet). Bitte folgen Sie den Anweisungen dieses Setup-Leitfadens, um Windows-Umgebungen für den Gebrauch mit dem IB-50 zu konfigurieren. Dazu führen Sie einfach Schritt 1 bis 2 aus. Anweisungen zumKonfigurieren anderer Umgebungen finden Sie im Online-Handbuch der CD-ROM.

(N) Wij danken u dat u de IB-50-netwerkkaart hebt aangeschaft (hierna te noemen "IB-50"). Volg de instructies in deze installatiehandleiding om Windows-omgevingen te configureren voor gebruik met de IB-50. Volg stap 1 tot en met 2. Raadpleeg voor instructies voor de configuratie van andere omgevingen de on line handleiding op de CD-ROM.

(I) Grazie per aver acquistato la scheda di rete IB-50 (che d'ora in avanti verrà chiamato "IB-50"). Seguire le istruzioni in questa guida all'installazione per configurare gli ambienti Windows per l'utilizzo con l'IB-50. È sufficiente seguire i passi da 1 a 2 della procedura. Per le istruzioni su come configurare altri ambienti, consultare il manuale online nel CD-ROM.

(CS) 感谢您购买IB-50网卡(下面简称为“IB-50”)。请按照此设置向导中的说明，配置使用IB-50的Windows环境。请执行步骤[1]至[2]。有关其它环境的配置说明，请参见CD-ROM中的联机手册。

(CT) 感謝您購買IB-50網路卡(下面簡稱 “IB-50”)。請按照此設定指南中的說明，安裝使用IB-50的Windows環境。請執行步驟[1]至[2]。有關環境之外的安裝說明，請參見CD-ROM中的線上手冊。

(K) IB-50 네트워크 카드 ("IB-50") 를 구입해 주셔서 감사합니다. 이 설치 안내서의 지침에 따라 IB-50 을 설치하여 사용할 수 있도록 Windows 환경을 구성합니다. [1] 단계에서 [2] 단계까지만 수행하면 됩니다. 다른 환경 구성에 대한 지침은 CD-ROM 의 온라인 설명서를 참조하십시오.

(J) このたびは、ネットワークカード IB-50（以降 IB-50）をお買いあげいただき、誠にありがとうございます。
本紙では Windows環境での環境構築方法を記載しています。①から②の手順で操作してください。他の環境での設定方法は付属のCD-ROMに収録されているオンラインマニュアルを参照してください。

- Supported Operating Systems / • Sistemas operativos compatibles /
- Sistemas operativos suportados / • Systèmes d'exploitation pris en charge
- Unterstütze Betriebssysteme /• Ondersteunde besturingssystemen/
- Sistemi operativi supportati /
- 支持的操作系统 / • 支援的操作系統 / • 지원되는 운영 체제 / • 対応OS

Windows 2000/XP/Vista/7/Server 2003/Server 2008
Netware 3.x, 4.x, 5.x, 6.x / MacOS 9.x, 10.x / UNIX

1

Installing the IB-50 in the printer and connecting to the network
Instalación de la IB-50 en la impresora y conexión a la red
Instalando a IB-50 na impressora e conectando à rede
Installation de la IB-50 dans l'imprimante et raccord au réseau
Installation der IB-50 im Drucker und Verbindung zum Netzwerk
De IB-50 in de printer installeren en aansluiten op het netwerk.
Installare la scheda IB-50 nella stampante ed eseguire il collegamento alla rete.
在打印机中安装IB-50并连接到网络
將 IB-50 安裝到印表機，並連接到網路
프린터에 IB-50 설치 및 네트워크에 연결
本製品をプリンターに装着しネットワーク環境に接続する

(E) • If you connect the IB-50 to another network later, restore the default settings before doing so.
Refer to the online manual included on the CD-ROM for details on restoring the factory default settings.
Before connecting the IB-50, prepare the network cable.

1. Turn off the printer and unplug the AC power cable from the printer.
2. Install the IB-50 in the printer. Refer to the installation guide of IB-50. For machines to be installed by a service person, refer to the service manual.
3. Connect the IB-50 to a PC or an Ethernet hub using a network cable.
4. Turn the printer on. Check that at least one of the two green LEDs on the IB-50 turns on.

(S) • Si posteriormente conecta el IB-50 a otra red, antes de hacerlo debe restaurar las configuraciones predeterminadas.
Consulte el manual en línea incluido en el CD-ROM para obtener una información detallada sobre la restauración de la configuración predeterminada de fábrica.
Antes de conectar la IB-50, prepare el cable de red.

1. Apague la impresora y desconecte el cable de alimentación de CA de la impresora.
2. Instale la IB-50 en la impresora. Consulte la guía de instalación de la IB-50.
   Para las máquinas instaladas por el técnico del servicio, vea el manual de servicio.
3. Conecte la IB-50 a un PC o a un concentrador Ethernet empleando un cable de red.
4. Encienda la impresora. Verifique que al menos uno de los dos LED verdes de la IB-50 se enciende.

(P) • Se ligar o IB-50 a outra rede posteriormente, restaure as predefinições antes de o fazer.
Consulte o manual on-line incluído no CD-ROM para obter detalhes sobre como restaurar as configurações padrão de fábrica. Antes de conectar a IB-50, prepare o cabo de rede.

1. Desligue a impressora e retire o cabo de alimentação CA da impressora.
2. Instale a IB-50 na impressora. Consulte o guia da instalação da IB-50. Para as máquinas que devem ser instaladas por pessoal de serviço qualificado, consulte o manual de serviço.
3. Conecte a IB-50 a um PC ou a um hub Ethernet usando um cabo de rede.
4. Ligue a impressora. Verifique se pelo menos um dos dois LEDs verdes na IB-50 está aceso.

(F) • Si vous connectez l'IB-50 à un autre réseau plus tard, vous devrez d'abord rétablir les paramètres par défaut.
Reportez-vous au manuel en ligne inclus sur le CD-ROM pour plus d'informations sur la restauration des paramètres d'origine. Préparez le câble réseau avant de raccorder la IB-50.

1. Éteignez l'imprimante et débranchez le câble d'alimentation.
2. Installez l'IB-50 dans l'imprimante. Reportez-vous au guide d'installation de l'IB-50.
   Pour les machines installées par un agent d'entretien, voir le manuel de service.
3. Raccordez la IB-50 sur un ordinateur ou sur un concentrateur Ethernet à l'aide d’un câble réseau.
4. Allumez l'imprimante. Vérifiez qu’au moins un des deux voyants verts sur la IB-50 s’allume.

(D) • Wenn der IB-50 später an ein anderes Netzwerk angeschlossen werden soll, müssen Sie vorher darauf achten, die Standardeinstellungen wiederherzustellen. Details zur Wiederherstellung der werksseitigen Standardeinstellungen finden Sie im Onlinehandbuch auf der CD-ROM. Stellen Sie vor dem Anschluss der IB-50 das Netzwerkkabel bereit.

1. Den Druckerstrom ausschalten und das Stromkabel vom Drucker abziehen.
2. Installieren Sie die IB-50 im Drucker. Siehe Installationsanweisung der IB-50.
   Angaben zu Maschinen, die von Service-Personal zu installieren sind, finden Sie in der Wartungsanleitung.
3. Schließen Sie die IB-50 an einen PC oder an einen Ethernet-Verteiler über ein Netzwerkkabel an.
4. Schalten Sie den Drucker ein. Überprüfen Sie, dass mindestens eine der beiden grünen LEDs an der IB-50 aufleuchtet.

(N) • Wanneer u de IB-50 later op een ander netwerk aansluit, moet u van tevoren de standaardinstellingen herstellen.
Raadpleeg de online-handleiding die op de CD-ROM staat voor details over het herstellen van de fabriekswaarden. Maak de netwerkkabel gereed voordat u de IB-50 aansluit.

1. Schakel de printer uit en maak het netsnoer los van de printer.
2. Installeer de IB-50 in de printer. Raadpleeg hiervoor de installatiehandleiding van de IB-50.
   Refereer aan de onderhoudshandleiding voor machines die geïnstalleerd dienen te worden door onderhoudspersoneel.
3. Sluit de IB-50 met behulp van een netwerkkabel aan op een PC of een Ethernet-hub.
4. Zet de printer aan. Controleer of ten minste één van de twee groene LED’s op de IB-50 gaat branden.

(I) • Se si collega l'IB-50 a un'altra rete in un secondo momento, ripristinare le impostazioni predefinite prima di farlo.
Fare riferimento al manuale in linea incluso nel CD-ROM per le istruzioni dettagliate su come ripristinare le impostazioni predefinite di fabbrica. Preparare il cavo di rete prima di collegare la scheda IB-50.

1. Spegnere la stampante e scollegare il cavo di alimentazione CA dalla stampante.
2. Installare la scheda IB-50 sulla stampante. Vedere la guida all'installazione di IB-50.
   Per le macchine che devono essere installate da un tecnico di assistenza, fare riferimento al manuale d'istruzioni.
3. Collegare la scheda IB-50 a un computer o a un hub Ethernet tramite un cavo di rete.
4. Accendere la stampante. Verificare che almeno uno dei due LED verdi della scheda IB-50 sia acceso.

(CS) 如果此后要将IB-50与其它网络连接，请在连接前恢复默认设置。
有关恢复出厂默认设置的详细信息，请参见CD-ROM上的联机手册。在连接 IB-50之前，准备好网络电缆。

1. 关闭打印机，并从打印机上拔下AC电源电缆。
2. 在打印机中安装 IB-50。请参见 IB-50 的安装手册。
   对于维修人员安装机器时，请参照维修手册。
3. 使用网络电缆将IB-50连接到PC或以太网集线器。
4. 打开打印机。检查IB-50上的两个绿色 LED 至少有一个为亮起状态。

(CT) 如果此後要將IB-50與其它網路連接，請在連接前恢復預設設定。
有關恢復預設設定的說明，請參見CD-ROM所隨附的線上手冊。連接IB-50之前，請先準備好網路纜線。

1. 關閉印表機，從印表機上拔下AC電源電纜。
2. 欲安裝 IB-50 至機器，詳見 IB-50 之安裝手冊。
   如由服務人員裝機，請參閱技術手冊。
3. 使用網路纜線將IB-50連接到 PC 或 Ethernet 集線器。
4. 開啓印表機。確認IB-50上的兩個綠色LED中至少有一個是開啓的。

(K) 나중에 IB-50 을 다른 네트워크에 연결할 경우 연결하기 전에 기본 설정을 복원합니다.
공장 기본 설정 복원에 대한 자세한 내용은 CD-ROM 에 포함된 온라인 설명서를 참조하십시오.

IB-50 을 연결하기 전에 네트워크 케이블을 준비합니다.

1. 프린터를 끄고 AC 전원 케이블을 프린터에서 분리합니다.
2. 프린터에 IB-50을 설치방법은 설치 설명서를 참조하십시오.
   서비스 기사가 설치하는 기계는 서비스 매뉴얼을 참조해 주십시오.
3. 네트워크 케이블을 사용하여 IB-50 을 PC 또는 이더넷 허브에 연결합니다.
4. 프린터의 전원을 켭니다. IB-50 에 있는 두 개의 녹색 LED 중 최소한 하나가 켜져 있는지 확인합니다.

(J) 他のネットワークにつなぎかえる場合は、工場出荷時設定に戻してください。
工場出荷時設定に戻す方法は、CDに収録されているオンラインマニュアルを参照してください 。

接続前にネットワークケーブルを準備してください。

1. プリンターの電源を切り、電源ケーブルをプリンターから抜きます。
2. 別紙（IB-50）の手順で IB-50をプリンターに装着します。
   サービス担当者が設置する機械は、サービスマニュアルを参照してください。
3. IB-50とPCまたはイーサネットハブをネットワークケーブルで接続します。
4. プリンターの電源を入れます。IB-50の2つの緑のLEDのうちどちらかが点灯することを確認します。

2

Configure the IB-50's IP address

Configurar la dirección IP del IB-50

Configurar o endereço IP do IB-50

Configurez l'adresse IP de l'IB-50

Konfigurieren Sie die IP-Adresse des IB-50

Configureer het IP-adres van de IB-50

Configurare l'indirizzo IP dell'IB-50

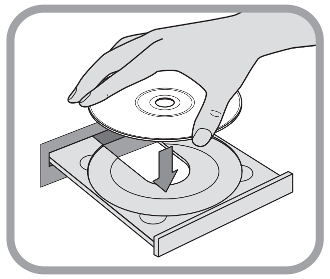
配置IB-50的IP地址

設定IB-50的IP位址

IB-50 의 IP 주소 구성

IB-50にIPアドレスを設定する

1.



(E) Insert the CD-ROM supplied with the interface card in your CD-ROM drive.

(S) Inserte en la unidad el CD-ROM que se suministra con la tarjeta de interfaz.

(P) Insira o CD-ROM fornecido com a placa de interface na unidade de CD-ROM.

(F) Insérez le CD-ROM fourni avec la carte d'interface dans votre lecteur de CD-ROM.

(D) Die der Schnittstellenkarte beiliegende CD-ROM in das CD-ROM-Laufwerk einlegen.

(N) Plaats de CD-ROM die bij de interfacekaart wordt geleverd, in uw CD-ROM-station.

(I) Inserire il CD-ROM fornito con la scheda di interfaccia nell'unità CD-ROM.

(CS) 将接口卡随附的光盘插入光盘驱动器。

(CT) 將介面卡隨附的光碟插入光碟機。

(K) 사용자의 CD-ROM 드라이브에 인터페이스와 함께 제공되는 CD-ROM 을 삽입합니다.

(J) 付属のCD-ROMをPCにセットします。

2.

(E) Click **Quick Network Setup**.

(S) Pulse Pulse **Quick Network Setup**.

(P) Clique em **Quick Network Setup**.

(F) Cliquez sur **Quick Network Setup**.

(D) Klicken Sie auf **Quick Network Setup**.

(N) Klik op **Quick Network Setup**.

(I) Fare clic su **Quick Network Setup**.

(CS) 单击**Quick Network Setup**。

(CT) 按一下**Quick Network Setup**。

(K) **Quick Network Setup** 를 클릭합니다.

(J) [**Quick Network Setup**]をクリックします。

3.

(E) Click **Next** when the Wizard screen is displayed.

(S) Haga clic en **Siguiente** cuando aparezca la pantalla del Asistente.

(P) Clique em **Avançar** quando a tela do Assistente for exibida.

(F) Cliquez sur **Suivant** lorsque l'écran de l'assistant s'affiche.

(D) Klicken Sie auf **Weiter**, wenn der Bildschirm des Assistenten gezeigt wird.

(N) Klik op **Volgende** wanneer het Wizard-scherm verschijnt

(I) Fare clic su **Avanti** alla visualizzazione della schermata di Installazione guidata stampante.

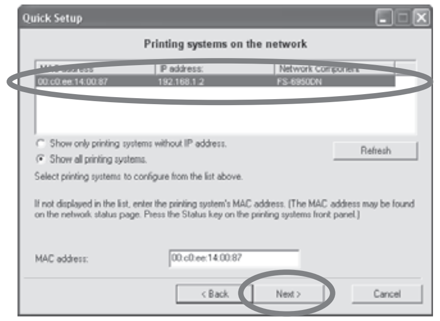
(CS) 显示向导屏幕时，单击下一步。

(CT) 當精靈畫面顯示時，按一下下一步。

(K) 마법사 화면이 표시되면 다음을 클릭합니다.

(J) ウィザード画面が表示されるので[次へ]をクリックします。

4.



Quick Setup

Printing systems on the network

MAC address	IP address:	Network Component
00:c0:ee:14:00:87	192.168.1.2	FS-6950DN

○ Show only printing systems without IP address.

● Show all printing systems.

Select printing systems to configure from the list above.

If not displayed in the list, enter the printing system's MAC address. (The MAC address may be found on the network status page. Press the Status key on the printing systems front panel.)

MAC address: 00:c0:ee:14:00:87

(E) Select the printer that the card is installed in from the list of print servers, and then click **Next**.

If the printer that the card is installed in does not appear in the list of search results :
- Make sure the computer's network environment (IP address) is correctly configured.
- Temporarily disable any security software and the standard firewall built into the operating system (for Windows XP), if applicable.

(S) Seleccione la impresora en la que está instalada la tarjeta en la lista de servidores de impresión y a continuación haga clic en **Siguiente**.

Si la impresora en la que está instalada la tarjeta no aparece en la lista de resultados de búsqueda :
- Asegúrese de que el entorno de red del PC (dirección IP) está correctamente configurado.
- Desactive temporalmente cualquier software de seguridad y el cortafuegos del sistema operativo (en Windows XP), si es aplicable.

(P) Selecione, na lista de servidores de impressão, a impressora na qual a placa está instalada e depois clique em **Avançar**.

Se a impressora na qual a placa está instalada não surgir na lista de resultados da pesquisa :
- Certifique-se de que o ambiente de rede do computador (endereço IP) está configurado correctamente.
- Desactive temporariamente qualquer software de segurança e a firewall standard integrada no sistema operativo (para Windows XP), se aplicável.

(F) Choisissez l'imprimante avec la carte installée dans la liste des serveurs d'impression, et cliquez ensuite sur **Suivant**.

Si l'imprimante avec la carte installée ne figure pas dans la liste des résultats de recherche :
- Vérifiez que l'environnement du réseau de l'ordinateur (l'adresse IP) est correctement configuré.
- Désactivez temporairement tout logiciel de sécurité et le firewall standard intégré par défaut au système d'exploitation (pour Windows XP), le cas échéant.

(D) Wählen Sie den Drucker, in dem die Karte installiert ist, aus der Liste der Druckserver aus, und klicken Sie anschließend auf **Weiter**.

Falls der Drucker, in dem die Karte installiert ist, nicht in der Liste der Suchergebnisse angezeigt wird :
- Vergewissern Sie sich, das die Netzwerkumgebung des PC (IP-Adresse) korrekt konfiguriert ist.
- Sperren Sie ggf. vorübergehend eine momentan aktivierte Sicherheits-Software und die Standard-Firewall des Betriebssystems (bei Windows XP).

(N) Selecteer de printer waarin de kaart is geïnstalleerd, uit de lijst van print-servers en klik daarna op **Volgende**.

Als de printer waarin de kaart is geïnstalleerd, niet in de lijst met zoekresultaten voorkomt :
- Controleer of de netwerkomgeving van de computer (het IP-adres) op de juiste manier is geconfigureerd.
- Schakel beveiligingssoftware en de standaardfirewall die in het besturingssysteem is ingebouwd (voor Windows XP) voorlopig uit, indien van toepassing.

(I) Selezionare la stampante in cui è installata la scheda dall'elenco dei server di stampa, quindi fare clic su **Avanti**.

Se la stampante in cui è installata la scheda non appare nell'elenco dei risultati della ricerca :
- Assicurarsi che l'ambiente di rete del computer (indirizzo IP) sia configurato correttamente.
- Disattivare temporaneamente qualsiasi software di sicurezza e il firewall di serie incorporato nel sistema operativo (per Windows XP), se applicabile.

(CS) 如果安装了该卡的打印机未出现在搜索结果列表中：
- 确认是否正确配置了电脑的网络环境(IP地址)。
- 暂时中断所有正在适用的安全软件和内置于操作系统(Windows XP)的标准防火墙的执行。

(CT) 從列印伺服器清單中選取安裝了網路卡的印表機，然後按一下下一頁。

如果安裝了網路卡的印表機沒有出現在搜尋結果 清單中：
- 確認是否正確設定了電腦的網路環境(IP位址)。
- 暫時中斷所有安全軟體和建於操作系統(Windows XP)的標準防火牆的執行。

(K) 인쇄 서버 목록에서 카드가 설치되어 있는 프린터를 선택하고 다음을 클릭합니다.

카드가 설치되어 있는 프린터가 검색 결과 목록에 표시되지 않는 경우:
- 컴퓨터의 네트워크 환경(IP 주소)이 제대로 구성되어 있는지 확인합니다.
- 운영 체제(Windows XP 용)에 내장되어 있는 보안 소프트웨어와 표준 방화벽을 잠시 사용하지 않도록 설정합니다.

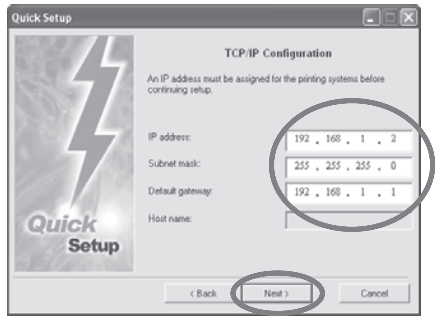
(J) プリントサーバーリストから、装着したプリンターを選択して、[次へ]をクリックします。

検索結果一覧に装着したプリンターが表示されないときは. . .

※PCのネットワーク環境（IPアドレス）が正しく設定されているかを確認してください。

※セキュリティソフトおよび、OS標準のファイアウォール機能（Windows XPの場合）をご利用の場合は、一時的に無効にしてください。

5.



Quick Setup

TCP/IP Configuration

An IP address must be assigned for the printing systems before continuing setup.

IP address: 192 . 168 . 1 . 2

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 192 . 168 . 1 . 1

Host name:

(E) Enter the IP address, Subnet mask, and Default gateway. Click **Next**.

(S) Introduzca la dirección IP, máscara de subred y Gateway por omisión. Pulse **Siguiente**.

(P) Introduza o Endereço IP, a Máscara de sub-rede e a Gateway padrão. Clique em **Avançar**.

(F) Saisissez l'adresse IP, le Masque de sous-réseau et la Passerelle par défaut. Cliquez sur **Suivant**.

(D) Geben Sie IP-Adresse, Subnetzmaske und Standard-Gateway ein, und klicken Sie dann auf **Weiter**.

(N) Voer het IP-adres, het Subnetmasker en de Standaardgateway in. Klik op **Volgende**.

(I) Immettere Indirizzo IP, Maschera sottorete e Gateway predefinito. Fare clic su **Avanti**.

(CS) 键入IP地址、子网掩码和默认网关。单击下一步。

(CT) 輸入IP位址、子網路遮罩和預設閘道。按一下下一頁。

(K) IP 주소, 서브넷 마스크 및 기본 게이트웨이를 입력합니다. 다음을 클릭합니다.

(J) IP アドレス、サブネットマスク、デフォルトゲートウェイを入力し、[次へ]をクリックします。

6.

(E) Confirm the settings and click **Next**.

(S) Confirme las configuraciones y pulse **Siguiente**.

(P) Confirme as configurações e clique em **Avançar**.

(F) Vérifiez les paramètres et cliquez sur **Suivant**.

(D) Überprüfen Sie die vorgenommenen Einstellungen, und klicken Sie dann auf **Weiter**.

(N) Bevestig de instellingen en klik op **Volgende**.

(I) Verificare le impostazioni e fare clic su **Avanti**.

(CS) 确认设置后单击下一步。

(CT) 確認設定後按一下下一頁。

(K) 설정을 확인하고 다음을 클릭합니다.

(J) 設定内容を確認し、[次へ]をクリックします。

7.

(E) When the final installation screen of the **Quick Network Setup** is displayed, click **Finish**.

(S) Cuando aparezca la pantalla de instalación final de **Quick Network Setup**.

(P) Quando aparecer o ecrã de instalação final do **Quick Network Setup**, clique em **Concluir**.

(F) Lorsque l'écran final d'installation de **Quick Network Setup** s'affiche, cliquez sur **Terminer**.

(D) Wenn die letzte Seite der **Quick Network Setup** angezeigt wird, klicken Sie auf **Ende**.

(N) Wanneer het laatste installatiescherm van **Quick Network Setup** wordt weergegeven, klikt u op **Voltooien**.

(I) Quando viene visualizzata la schermata di installazione finale di **Quick Network Setup**, fare clic su **Fine**.

(CS) 显示**Quick Network Setup**的最后安装画面时，单击完成。

(CT) 顯示**Quick Network Setup**的最後安裝畫面時，按一下完成。

(K) **Quick Network Setup**의 마지막 설치 화면이 표시되면 마침을 클릭합니다.

(J) ［**Quick Network Setup**］の終了画面が表示されたら、［完了］をクリックします。

8.

(E) For the operation of the IB-50, refer to the online manual on the CD-ROM

(S) Para obtener información sobre la IB-50, consulte el manual en línea del CD-ROM.

(P) Para a operação da IB-50, consulte o manual on-line no CD-ROM.

(F) Pour l'utilisation de l'IB-50, reportez-vous au manuel en ligne sur le CD-ROM.

(D) Um die IB-50 in Betrieb zu nehmen, sehen Sie im Online-Handbuch auf der CD-ROM nach.

(N) Raadpleeg voor de bediening van de IB-50 de onlinehandleiding op de CD-ROM.

(I) Per utilizzare la scheda IB-50, fare riferimento al manuale in linea incluso nel CD-ROM.

(CS) 有关 IB-50 的操作情况，请参见 CD-ROM 中的联机手册。

(CT) 有關 IB-50 的操作方法，請參照 CD-ROM 中的線上手冊。

(K) IB-50 의 조작방법에 대해서 CD-ROM에 포함된 온라인 설명서를 참조하십시오.

(J) IB-50の操作方法についてはCD-ROMに収録されているオンラインマニュアルを参照して下さい。

2011.6
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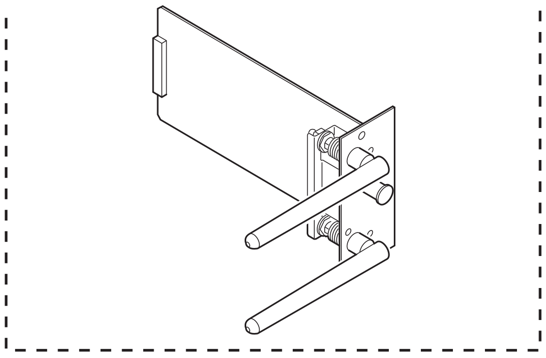
Wireless LAN interface Installation Guide

305J55631001

IB-51



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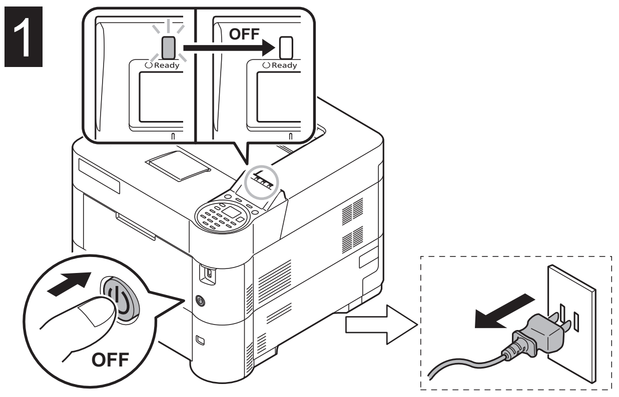

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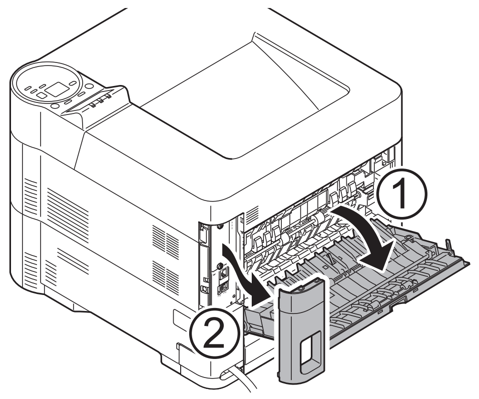

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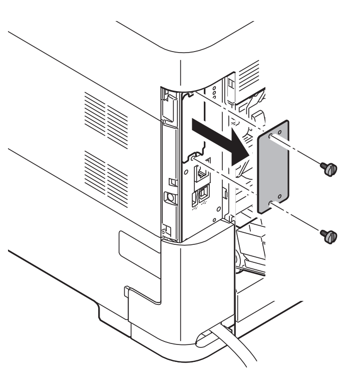

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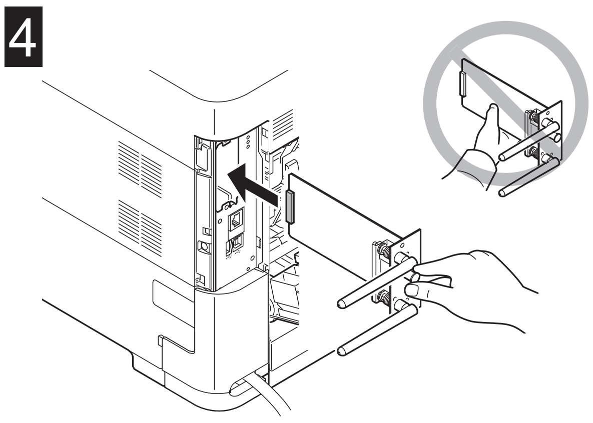
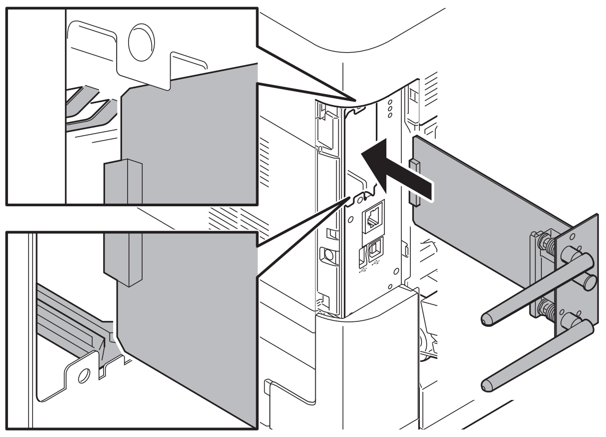
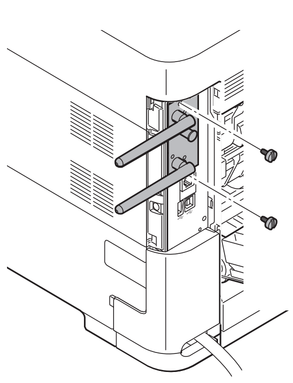


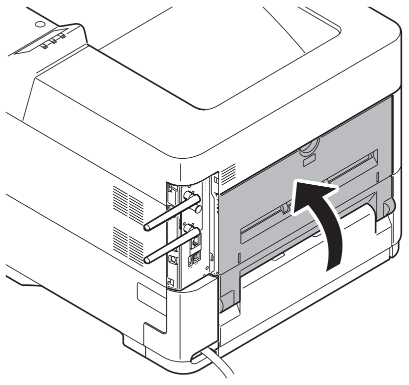
5



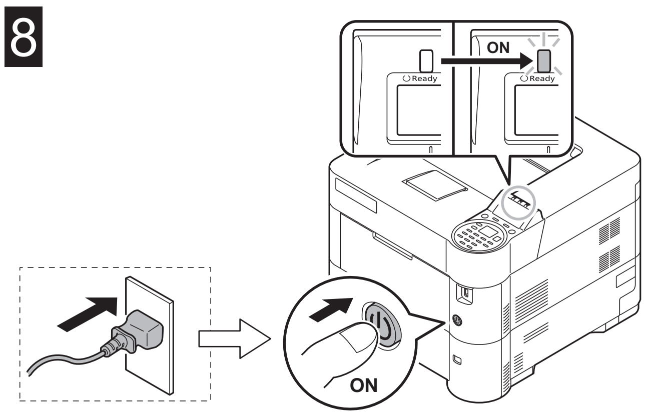
6



7



8



English

Optional Wireless Network Interface Kit IB-51 Installation Guide

Introduction

The IB-51 is an optional wireless network interface kit for use with the MFPs and the page printers. Please read this Installation Guide thoroughly so that you understand the correct installation method.

This wireless network interface kit can be installed in other models using the same installation procedure.

Packing List

IB-51	1
Installation Guide (this guide)	1
CD-ROM	1

Precautions for Handling the Wireless Network Interface Kit

When handling the wireless network interface kit, adhere to the following precautions.

- The wireless network interface kit is delivered in an antistatic bag. To prevent any damage, briefly touch a large metal object to ensure discharge of static electricity before removing the wireless network interface kit from the bag.
- Never touch the wireless network interface kit's connector section directly with hands.
- When holding the wireless network interface kit, avoid contact with the surface of the circuit board. Hold it at the edges.
- Do not apply undue force when installing.

Installing the Wireless Network Interface Kit

CAUTION

Before installing (or removing) the wireless network interface kit, be sure to turn off the machine's power and disconnect the power cord plug from the AC outlet.

Verifying Installation of the Wireless Network Interface Kit

To verify that the wireless network interface kit has been correctly installed, try to print out the status page.

Refer to the Operation Guide for the method for printing a status page.

Network settings

For the network settings and operation procedure, refer to the printer's Operation Guide and the wireless network interface manual.

Français

Kit d'interface réseau sans fil IB-51 en option Guide d'installation

Introduction

L'IB-51 est un kit d'interface réseau sans fil en option destiné à être utilisé avec les imprimantes multifonctions et les imprimantes par page. Veuillez lire entièrement ce guide d'installation et vous assurer que vous comprenez bien les méthodes d'installation.

Ce kit d'interface réseau sans fil peut être installé dans d'autres modèles à l'aide de la même procédure d'installation.

Contenu de l'emballage

IB-51	1
Guide d'installation (ce manuel)	1
CD-ROM	1

Précautions de manipulation du kit d'interface réseau sans fil

Lorsque vous manipulez le kit d'interface réseau sans fil, observez les précautions suivantes.

- Le kit d'interface réseau sans fil est livré dans un sac antistatique. Avant de le retirer du sac, touchez brièvement un grand objet métallique pour vous décharger de toute électricité statique.Vous éviterez ainsi d'endommager le kit d'interface réseau sans fil.
- Ne touchez jamais directement la partie du connecteur du kit d'interface réseau sans fil avec les mains.
- Lorsque vous tenez le kit d'interface réseau sans fil, ne touchez pas la surface de la carte de circuits imprimés. Saisissez-le par les bords.
- N'appliquez aucune force inutile en l'installant.

Installation du kit d'interface réseau sans fil

ATTENTION

Avant d'installer (ou de retirer) le kit d'interface réseau sans fil, mettez toujours l'imprimante hors tension et débranchez la fiche du cordon d'alimentation de la prise de courant.

Vérification de l'installation du kit d'interface réseau sans fil

Pour vous assurer que le kit d'interface réseau sans fil a été correctement installé, essayez d'imprimer la page d'état de l'imprimante.

Pour connaître la méthode d'impression de la page d'état, consultez le manuel d'utilisation.

Réglages réseau

Pour les réglages réseau et la procédure d'utilisation, consultez le manuel d'utilisation de l'imprimante et le manuel de l'interface réseau sans fil.

Español

Kit de interfaz de red inalámbrica IB-51 opcional Guía de instalación

Introducción

El IB-51 es un kit de interfaz de red inalámbrica opcional para utilizar con la copiadora e impresora de hojas. Lea completamente esta Guía de instalación de forma que pueda entender los métodos de instalación y operación correctos.

Este kit de interfaz de red inalámbrica puede instalarse en otros modelos utilizando el mismo procedimiento de instalación.

Lista del contenido del paquete

IB-51	1
Guía de instalación (este folleto)	1
CD-ROM	1

Precauciones para el manejo del kit de interfaz de red inalámbrica

Cuando maneje el kit de interfaz de red inalámbrica, tenga en cuenta las siguientes precauciones.

- El kit de interfaz de red inalámbrica se entrega en una bolsa antiestática. Para evitar cualquier daño, antes de sacar el kit de interfaz de red inalámbrica de la bolsa, toque un objeto metálico grande para descargar la electricidad estática de su cuerpo.
- Nunca toque la sección del conector del kit de interfaz de red inalámbrica directamente con las manos.
- Cuando sostenga el kit de interfaz de red inalámbrica, no toque con las manos la superficie de la placa del circuito impreso. Sujétela por los bordes.
- No aplique demasiada fuerza al realizar la instalación.

Instalación del kit de interfaz de red inalámbrica

PRECAUCIÓN

Antes de instalar (o desmontar) el kit de interfaz de red inalámbrica, asegúrese de desconectar la alimentación de la impresora y de desenchufar el cable de alimentación de la toma de corriente de CA.

Verificación de la instalación del kit de interfaz de red inalámbrica

Para verificar que el kit de interfaz de red inalámbrica ha sido instalado correctamente, trate de imprimir la página de estado de la impresora.

Consulte la Guía de uso para obtener información sobre la impresión de la página de estado de la impresora.

Configuración de la red

Si desea obtener información sobre la configuración de la red y el procedimiento de operación, consulte la Guía de uso y el manual de la interfaz de red inalámbrica.

Deutsch

Optionales Wireless Network Interface Kit IB-51 Installationsanleitung

Einführung

Das IB-51 ist ein optionales Wireless Network Interface Kit zur Verwendung mit den MFPs und den Seitendruckern. Bitte lesen Sie sich diese Installationsanleitung sorgfältig durch, damit Sie das Gerät korrekt installieren.
Dieses Wireless Network Interface Kit kann mithilfe des selben Installationsvorgangs in anderen Modellen eingebaut werden.

Verpackungsinhalt

IB-51	1
Installationsanleitung (diese Anleitung)	1
CD-ROM	1

Vorsichtsmaßnahmen bei der Handhabung des Wireless Network Interface Kits

Bitte beachten Sie die folgenden Vorsichtshinweise beim Umgang mit dem Wireless Network Interface Kit.

- Das Wireless Network Interface Kit wird in einem Antistatikbeutel geliefert. Um eine Beschädigung des Wireless Network Interface Kits zu vermeiden, sollten Sie kurz einen großen Gegenstand aus Metall berühren, um sich von statischer Elektrizität zu entladen, bevor Sie das Wireless Network Interface Kit aus der Verpackung entfernen.
- Berühren Sie auf keinen Fall die Steckleiste des Wireless Network Interface Kits mit bloßen Händen.
- Achten Sie beim Halten des Wireless Network Interface Kits darauf, eine Berührung der Platinenoberfläche zu vermeiden. Halten Sie das Wireless Network Interface Kit stets an den Kanten der Platine.
- Vermeiden Sie übermäßige Kraftanwendung beim Installieren.

Installation des Wireless Network Interface Kits

VORSICHT

Achten Sie vor dem Installieren (bzw. Entfernen) des Wireless Network Interface Kits unbedingt darauf, den Drucker auszuschalten und das Netzkabel von der Netzsteckdose zu trennen.

Überprüfung der Installation des Wireless Network Interface Kits

Um eine korrekte Installation des Wireless Network Interface Kits zu überprüfen, drucken Sie die Statusseite aus.
Die Vorgehensweise für das Ausdrucken einer Statusseite finden Sie in der Bedienungsanleitung.

Netzwerkeinstellungen

Netzwerkeinstellungen und Betriebsverfahren finden Sie in Bedienungsanleitung und Anleitung vom Wireless Network Interface.

Italiano

Kit interfaccia di rete wireless IB-51 opzionale Guida all’installazione

Introduzione

IB-51 è un kit interfaccia di rete wireless opzionale per utilizzi con stampanti multifunzione (MFP) e con stampanti a pagine. Si prega di leggere attentamente la presente Guida all’installazione per comprendere il corretto metodo di installazione.
Questo kit interfaccia di rete wireless può essere installato in altri modelli che utilizzano la stessa procedura di installazione.

Contenuto della confezione

IB-51	1
Guida all’installazione (la presente guida)	1
CD-ROM	1

Precauzioni d’uso del kit interfaccia di rete wireless

Durante l’utilizzo del kit interfaccia di rete wireless, adottare le precauzioni che seguono.

- Il kit interfaccia di rete wireless è spedito in una custodia antistatica. Per evitare eventuali danni, toccare per pochi istanti un oggetto metallico di grandi dimensioni per assicurarsi di scaricare l’elettricità statica prima di rimuovere la il kit interfaccia di rete wireless dalla custodia.
- Non toccare la sezione del connettore del kit interfaccia di rete wireless direttamente con le mani.
- Nell’afferrare il kit interfaccia di rete wireless, evitare il contatto con la superficie della scheda a circuito. Afferrarlo alle estremità.
- Non esercitare una forza eccessiva durante l’installazione.

Istallazione del kit interfaccia di rete wireless

ATTENZIONE:

prima di installare (o di rimuovere) il kit interfaccia di rete wireless, assicurarsi di aver spento l’alimentazione della macchina e di aver disconnesso la spina del cavo di alimentazione dalla presa CA.

Verifica dell’installazione del kit interfaccia di rete wireless

Per verificare che il kit interfaccia di rete wireless sia stato installato correttamente, stampare la pagina di stato.
Per scoprire le modalità di stampa della pagina di stato, consultare la Guida alle funzioni.

Impostazioni di rete

Per le impostazioni di rete e la procedura operativa, consultare la Guida alle funzioni della stampante e il manuale dell’interfaccia di rete wireless.

简体中文

选装无线网络接口套件 IB-51 安装手册

前言

IB-51 是一款适用于 MFP 和页式打印机的选装无线网络接口套件。为了解正确的安装方法，请仔细通读本《安装手册》。

本无线网络接口套件可通过同样的安装步骤安装到其他机型上去。

包装内容列表

IB-51	1
安装手册（本手册）	1
CD-ROM	1

使用本无线网络接口套件的注意事项

使用本无线网络接口套件时，请遵守以下注意事项。

- 本无线网络接口套件被包装在防静电袋中。将无线网络接口套件从包装袋中取出之前，请短暂触摸大件金属物体以消除静电，以免造成损坏。
- 请勿直接用手触摸无线网络接口套件的连接器部分。
- 拿握无线网络接口套件时，请勿接触到电路板的表面。请拿握其边缘。
- 安装时请不要过于用力。

安装本无线网络接口套件

注意：

安装（或拆卸）本无线网络接口套件前，请务必关掉机器的电源并将电源线插头从 AC 插座上断开。

确认本无线网络接口套件安装正确

为确认本无线网络接口套件已经正确安装，请尝试打印状态页。
有关打印状态页的方法，请参阅《操作手册》。

网络设置

有关网络设置的操作方法和步骤，请参阅打印机的《操作手册》和无线网络接口手册。

동봉물

옵션 무선 네트워크 인터페이스 키트 IB-51 토너 설치 안내서

소개

IB-51은 MFP와 페이지 프린터에 사용되는 옵션 무선 네트워크 인터페이스 키트입니다. 본 토너 설치 안내서를 주의 깊게 읽고 올바른 설치 방법을 숙지하시기 바랍니다. 본 무선 네트워크 인터페이스 키트는 같은 설치 절차를 적용하여 다른 모델에 설치될 수 있습니다.

포장 내용물

IB-51	1
토너 설치 안내서 (본 안내서)	1
CD-ROM롬	1

무선 네트워크 인터페이스 키트 취급 시 주의사항

무선 네트워크 인터페이스 키트 취급 시, 다음과 같은 주의사항을 지켜주시기 바랍니다.

- 무선 네트워크 인터페이스 키트는 정전기 방지 봉투에 포장되어 있습니다. 무선 네트워크 인터페이스 키트를 꺼내기 전에 손상을 예방하기 위해 큰 금속 물체를 잠시 만져서 정전기를 방지하시기 바랍니다.
- 무선 네트워크 인터페이스 키트의 연결부를 직접 손으로 만지지 마십시오.
- 무선 네트워크 인터페이스 키트를 잡을 때는 회로판 표면에 닿지 않도록 끝부분을 잡으십시오.
- 설치 시 과도한 힘을 가하지 마십시오.

무선 네트워크 인터페이스 키트 설치

주의사항

무선 네트워크 인터페이스 키트를 설치(또는 제거)하기 전, 기기의 전원을 끄고 AC 아우트렛에서 전원선을 분리하십시오.

무선 네트워크 인터페이스 키트 설치 확인

무선 네트워크 인터페이스 키트가 올바르게 설치되었는지 확인하려면 상태 페이지를 출력해보십시오. 상태 페이지를 출력하는 방법에 관해서는 사용설명서를 참고하시기 바랍니다.

네트워크 설정

네트워크 설정 및 사용 절차에 관련된 정보는 프린터의 사용설명서와 무선 네트워크 인터페이스 매뉴얼을 참고하시기 바랍니다.

日本語

オプションワイヤレスネットワーク インターフェイスキット IB-51 インストールガイド

はじめに

IB-51 は京セラ複合機およびプリンター用ワイヤレスネットワークインターフェイスキットです。本書をよくお読みいただき、正しく装着してください。なお、本オプションはその他の機種でも同様の手順で装着できます。

梱包内容の確認

ワイヤレスネットワークインターフェイス本体	1
インストールガイド(本書)	1
CD-ROM	1

取扱い上の注意

本オプションの取り扱いには、以下のことにご注意ください。

- 本品は静電気防止対策済みの袋に入っています。袋の中から取り出す際は、念のため大きな金属物に触れて身体の静電気を取り除いてください。
- 本品のコネクター部分には手を触れないでください。
- 本品を持つ際は基板の表面に手を触れずに、基板の端を持ってください。
- 装着時は無理な力を加えないでください。

ワイヤレスネットワークインターフェイスキットの装着

注意

本オプションの装着（または取り外し）は、複合機またはプリンターの電源を切り、電源プラグをコンセントから抜いた状態で行ってください。

装着の確認

ステータスページを印刷して、本オプションが正しく装着されたかを確認できます。
ステータスページの印刷方法は、使用説明書を参照してください。

ネットワークの設定

ネットワークの設定、操作手順については、プリンターの使用説明書とワイヤレスネットワークインターフェイスのマニュアルを参照してください。